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# NASA Procedural Requirements

NPR 1441.1E

Effective Date: January 29,

2015 Expiration Date: January

29, 2020

#### **COMPLIANCE IS MANDATORY**

### **NASA Records Management Program Requirements**

Responsible Office: Office of the Chief Information Officer

NOTE: The NASA Record Retention Schedules (NRRS), previously published in this directive, was updated and is now published as a separate document entitled, NRRS 1441.1, NASA Record Retention Schedules. View NRRS 1441.1: http://nodis3.gsfc.nasa.gov/npg\_img/N\_PR\_1441\_001E\_/NRRS\_1441\_001A.doc

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#### **Preface**

### P.1 Purpose

- a. This NASA Procedural Requirements (NPR) directive establishes procedural requirements in accordance with 36 Code of Federal Regulations (CFR) Chapter XII, Records Management, and NASA Policy Directive (NPD) 1440.6, NASA Records Management. It provides overall, high-level direction to NASA Centers for implementation and ongoing operation of an effective Records Management (RM) program at the Agency level and within each Center, while allowing flexibility for establishment and implementation of local procedures and processes to meet specific needs of Center-level directorates, mission programs, and offices.
- b. It establishes minimum requirements for managing NASA record information throughout its life cycle -- from creation/collection, categorization, maintenance, and operational use; through retention after active use ("retirement"); to eventual disposition by destruction or transfer to the National Archives for historical preservation.
- c. It also establishes the procedural requirements for development, maintenance, and use of NASA Records Retention Schedules contained in a separate publication, NRRS 1441.1, NASA Records Retention Schedules (NRRS), published in NASA Online Directives Information System (NODIS) under "other documents," that govern the length of records retention and their final disposition.

### P.2 Applicability

- a. This NPR is applicable to NASA Headquarters (HQ) and NASA Centers, including Component Facilities and Technical and Service Support Centers. These requirements apply to Jet Propulsion Laboratory (JPL), a Federally Funded Research and Development Center, other contractors, grant recipients, or parties to agreements only to the extent specified or referenced in the suitable contracts, grants, or agreements.
- b. In this directive, all mandatory actions (i.e., requirements) are denoted by statements containing the term "shall." The terms "may" or "can" denote discretionary privilege or permission, "should" denotes a good practice and is recommended but not required, "will" denotes expected outcome, and "are/is" denotes descriptive material.
- c. In this directive, all document citations are assumed to be the latest version, unless otherwise noted.

### **P.3 Authority**

- a. Records Management by the Archivist of the United States and by the Administrator of the General Services, 44 U.S.C. §§ 2901 et seq.
- b. Disposal of Records, 44 U.S.C. §§ 3301 et seq.
- c. Records Management, 36 CFR, Chapter XII, Subchapter B.
- d. NPD 1440.6, NASA Records Management.

### P.4 Applicable Documents and Forms

- a. NPD 2800.1, Managing Information Technology.
- b. NPR 1040.1, NASA Continuity of Operations (COOP) Planning Procedural Requirements.
- c. NPR 2190.1, NASA Export Control Program.
- d. NPR 9660.1, Vital Financial Records for Emergency Operations.
- e. NID 1600.55, Sensitive But Unclassified (SBU) Controlled Information.
- f. NID 7120.99, NASA Information Technology and Institutional Infrastructure Program and Project Management Requirements.
- g. ISO 15489, Information and Documentation Records Management.
- h. NASA Form 1786, Inter- or Intra-Agency Transfer of NASA Records Agreement.
- i. Standard Form 115, Request for Records Disposition.
- j. Standard Form 135, Records Transmittal and Receipt.
- k. National Archives and Records Administration (NARA) General Records Schedules.
- I. IT-HBK 1440.01, Records Planning and Management.

- m. IT-HBK 1441.01, Records Retention and Disposition.
- n. ITS-HBK 1382.03-01 Privacy Risk Management and Compliance: Collections, PIAs, and SORNs.
- o. NRRS 1441.1, NASA Records Retention Schedules.

#### P.5 Measurement/Verification

- a. In order to determine the extent to which NASA employees follow the required processes specified in this NPR:
- (1) The NASA Records Officer shall conduct periodic Agency RM self-assessments on behalf of the Senior Agency Official (SAO) for Records Management and report the results to NARA.
- (2) The NASA Records Officer shall conduct other periodic reviews and assessments of NASA Centers' RM Programs to assess overall and/or specific effectiveness and compliance with relevant regulations and policies.
- (3) Center Records Managers shall conduct periodic internal self-assessments of Records Management implementation by organizations and projects at their Centers.

#### P.6 Cancellation

NPR 1441.1D, NASA Records Retention Schedules, dated February 24, 2003. Note for reviewers: NASA Records Retention Schedules (NRRS) previously in NPR 1441.1 are also being updated and will be incorporated by reference in the NPR. The NRRS will be published in a separate document numbered "NRRS 1441.1," titled "NASA Records Retention Schedules."

### **Chapter 1. NASA Records Management Program Overview**

#### 1.1 Records

- 1.1.1 All Federal agencies are required by law and Agency policy to maintain and preserve records. The heads of Federal agencies are responsible for preventing any unlawful alteration, removal, or any accidental or unauthorized destruction of records.
- 1.1.2 Records (or Federal records) are defined in 44 U.S.C. §3301 as "all books, papers, maps, photographs, machine readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States Government under Federal law or in connection with the transaction of public business and preserved or suitable for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations or other activities of the Government or because of the informational value of the data in them."
- 1.1.3 Nonrecord materials include those Federally owned informational or documentary materials that do not meet the statutory definition of records (44 U.S.C. §3301) or that have been excluded from coverage by the definition. Excluded materials include reference and duplicative information or materials intended solely for exhibit.
- 1.1.4 Documentary materials are NASA records when they meet both of the following conditions:
- a. They are made or received by NASA under Federal law or in connection with the transaction of agency business, and
- b. They are preserved or are suitable for preservation as evidence of NASA organization and activities or because of the value of the information they contain.

#### 1.2 Information vs. Records

- 1.2.1 Information comes in a variety of forms and formats and the digital age has led to the creation of a multitude of new formats. The format of documentation does not alter the retention value of the content of the documentation (whether paper, film, photograph, electronic communications, notices/announcements created as blog entries, or other Web application content, or content residing in a cloud).
- 1.2.2 Information, regardless of format, constitutes a record when it meets the definition of a record provided in 1.1.2.

### 1.3 "Permanent" and "Temporary" Records Differentiated

- 1.3.1 A permanent record is any Federal record of such historical significance as to warrant NARA's authorization of its preservation in the National Archives beyond the time that it is needed for NASA administrative, legal, or fiscal purposes. Permanent records are indicated as such in the NRRS with a permanent disposition authority. An example of permanent records are those of senior NASA managers specified in NRRS 1/item 22.A.1. All such records will be accessioned by NARA into the National Archives for preservation for the life of the Republic..
- 1.3.2 A temporary record is any record which has been determined by the Archivist of the United States to have insufficient value (on the basis of current standards) to warrant its permanent preservation by the National Archives. Temporary records are approved by NARA for disposal after a specified retention period which is provided in the NRRS. This does not mean that a temporary record may, by default, be destroyed immediately.

### 1.4 Media Neutrality

- 1.4.1 The basic requirements for records management (e.g., identification, protection, management, and disposition) are considered "media neutral" in that they apply to all records regardless of their format. While there may be additional requirements for specific records formats, all procedural requirements in this document are considered media neutral unless otherwise noted.
- 1.4.2 Records that are created electronically, e.g., "born digital," are managed electronically. NASA's approach to addressing the management of certain digital content (e.g., e-mail, cloud, and social media content) is addressed in Chapter 5.
- 1.4.3 Complex data and software objects within systems, including analysis and design models (e.g. trajectory analysis or structural design models) that serve as indispensable contributors to records themselves should be delivered in formats (such as a lightweight format) or standard that accommodate long-term data accessibility.

### 1.5 Introduction to Records Life Cycle

- 1.5.1 This requirements document utilizes a "Records Life Cycle" concept as a framework for defining and prescribing Agency-wide processes to ensure management of records and valued information assets throughout their life cycle. The records' uses differ as do the requirements for managing them at different phases of the records' lives. The records life-cycle concept is also used as an organizing framework within Chapter 3 of this NPR, with sections containing the procedural requirements for each of the four life-cycle phases.
- 1.5.2 Figure 1 illustrates the Records Life Cycle. Records are either created or received by NASA employees or contractors in the course of conducting NASA business. During their active use phase, the records are used for various purposes by NASA in its business processes. However, there comes a time (inactive or semi-active phase) when the records are only occasionally sought for reference purposes. After the inactive records have fulfilled their authorized retention periods, they are either destroyed, if temporary records, or transferred to the National Archives, if permanently valued. In addition, copies of inactive records or records due for disposition may at times be brought into a new NASA office or function to be used as inputs for the new business processes. An example of such re-purposing was the Space Launch System Program's incorporation of temporary Solid Rocket Booster records from the completed Space Shuttle Program, with careful documentation to maintain traceability of the records' history.

### The Records Life Cycle

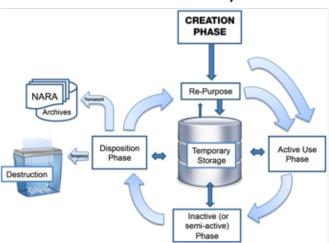


Figure 1, Records Life Cycle

1.5.3 The Records Life Cycle model and approach is further described in IT-HBK 1440.01, Records Planning and Management, along with more detailed explanations and procedures/guidelines for its use.

### Chapter 2. NASA Records Management Responsibilities

#### 2.1 The NASA Chief Information Officer (CIO) shall:

- a. Have overall responsibility for the NASA RM Program.
- b. Ensure that the Agency information technology (IT) project governance process incorporates RM requirements in the design or acquisition of new or significantly revised Electronic Information Systems (EIS) or services.

#### 2.2 NASA Office of the General Counsel shall:

- Review and concur on all new or revised records retention schedules for NASA records.
- b. Issue notification and requirements of Agency-wide or Headquarters legal record holds necessitated by litigation or investigations.

#### 2.3 Center Chief Counsels shall:

2.3.1. Issue notification and requirements of Center legal record holds necessitated by litigation or investigations.

#### 2.4 Inspector General shall:

2.4.1 The NASA Inspector General shall issue notification and requirements of record holds necessitated by audits or inspections conducted by the Office of Inspector General (OIG).

#### 2.5 NASA Center CIOs shall:

- a. Ensure records management requirements are addressed in the development or acquisition of any new or significantly revised Center specific systems or services.
- b. Provide Center processes for migration of inactive digital records to updated formats and media to permit records retrieval throughout their scheduled life cycle.

#### 2.6 NASA Records Officer shall:

- a. Establish and direct the NASA RM Program and its associated procedures.
- b. Administer the process of developing and submitting new or revised retention schedules for approval by the Archivist of the United States.
- c. Maintain and publish procedures, records retention schedules, guidance, and current information to assist Agency personnel in implementation of these procedural requirements.
- d. Make RM training available so Agency personnel understand their responsibilities for protecting and managing the records they create, receive, or maintain.
- e. Approve all transfers of permanent NASA records to the National Archives.
- f. Implement and orchestrate regular assessments of the effectiveness of RM across the Agency.
- g. Collaborate with IT personnel in implementing digital management of records that span the Agency.
- h. Provide consultation to functions establishing record requirements for an Agency-wide procurement action, partnership, or agreement that will involve creation, receipt, or management of records documenting Agency functions.
- i. Assist attorneys with record holds and discovery requests that span multiple NASA Centers.
- j. Oversee all other Agency-level aspects of the RM program.

### 2.7 Center Records Managers shall:

- a. Establish and administer Center RM procedures for identifying, classifying, maintaining, and disposing of records across their Center.
- b. Identify storage locations and provide Center procedures for movement of inactive records into and out of those locations until the records have met their retention periods.

- c. Coordinate transfers of records custody from one Center organization to another, or from one Center to another NASA Center, Agency, or NARA facility.
- d. Collaborate with IT personnel in implementation of digital records management of Center records.
- e. Provide records consultation to functions establishing requirements for Center procurement actions, partnerships, or agreements that will involve creation, receipt, or management of records documenting Center functions.
- f. Coordinate with impacted organizations all record holds and legal discovery actions involving Center records.
- g. Coordinate with Center Offices of Human Resources to integrated records management into the employee exit clearance process.

#### 2.8 Center Records Liaison Officers (RLOs) shall:

- a. Sustain general knowledge of the records, both functional mission and administrative, within their specific offices.
- b. Communicate/disseminate records-related information from the Center Records Manager to their offices.
- c. Coordinate the compilation of organizational/office records listings to meet Center procedural requirements as discussed in the next chapter.
- d. Oversee and consult with organization/office personnel to ensure proper management and disposition of records.

#### 2.9 Records Owners shall:

- a. Differentiate, and ensure segregation of, record from nonrecord material produced or received in performance of their function.
- b. Ensure applicable records access restrictions are associated with their records and appropriate protections implemented.
- c. Ensure records for which they are responsible are managed and dispositioned in accordance with the requirements of this NPR.

#### 2.10 Information System Owners shall:

- a. Identify records management as a documented requirement when developing or acquiring an EIS or automated tool that will create or maintain NASA records.
- b. Implement processes to periodically migrate records within the system to newer formats to maintain records classifications, immutability, and retrievability.
- c. Implement disposition of electronic records in accordance with the requirements of Records Owners and this NPR.
- d. Coordinate system records management capabilities with their primary Center technical repositories' capabilities to provide an efficient and coordinated data management strategy that supports both engineering data and records management long-term storage, retrieval, and use case objectives.

### 2.11 All NASA employees shall:

- a. Determine if information they create, receive, or manage (e.g., book, papers, documents, pictures, e-mail) in the course of performing NASA business is "record" or "nonrecord."
- b. Manage records that they have created or received in accordance with this NPR.
- c. Ensure all records under their control are dispositioned only in accordance with NRRS 1441.1, NASA Records Retention Schedules or General Records Schedules (GRS).

### Chapter 3. Records Life-Cycle Governance Procedural Requirements

#### 3.1 Records Creation Phase

- 3.1.1 Upon formulation of a new organization or NASA program or project, managers/process owners over NASA offices should identify all planned systems or applications within their office that will contain Federal records.
- 3.1.2 RM considerations shall be addressed during the development and implementation of new business processes, programs, and projects by NASA Records Owners in coordination with their Center Records Manager. Situations and types of activities where RM considerations are relevant include:
- a. Data management planning and implementation, both long and short term.
- b. Organizational/mission changes that will result in creation of new records or re-purposing legacy records previously maintained by another organization/function or for another purpose.
- c. Continuous Process Improvement projects that will result in creation of new records or re-purposing of legacy records.
- d. Development, major upgrade, or acquisition of agency information systems/applications.
- 3.1.3 All records groups (series) that will be created in the new or modified business processes, programs, and systems projects shall be identified and assessed by Records Owners. The Records Owners should specifically identify:
- a. Where records will be stored/maintained -- physical location or EIS and where it is housed.
- b. Record series description and pertinent NRRS or GRS items citations.
- c. Unscheduled record series needing new or revised schedule items.
- d. Ownership and record custodianship for each record series.
- e. How and when each record series will be reviewed and cut off, or other external event that will trigger a change from record active use life-cycle phase to inactive use. This cutoff serves as the start point for required retention periods and calculation of authorized disposition dates.
- f. Appropriate access or use restrictions through consultation with suitable functional experts. Examples of such restrictions include International Traffic in Arms Regulations (ITAR), Export Control, Personally Identifiable Information (PII)/Privacy Act, Information in Identifiable Form (IIF), or other Controlled Unclassified Information/Sensitive But Unclassified (CUI/SBU).

Note: Reference: NPR 2190.1, NASA Export Control Program, ITS-HBK-1382.03-01, Privacy Risk Management and Compliance: Collections, Privacy Impact Assessments (PIAs) and System of Records Notices (SORNs), and NID 1600.55, Sensitive But Unclassified (SBU) Controlled Information.

- (1) Restriction determinations for electronic systems based on the records content may be accomplished via Records or Systems Owners completion of Initial Privacy Threshold Analyses (IPTAs)/PIAs in the Privacy and Controlled Unclassified Information (CUI) Assessment Tool (PCAT).
- (2) To ensure suitable restrictions are enforced throughout the life cycle, records shall be properly identified or "tagged" as they are created by the Records Creator in accordance with appropriate Agency policy for the particular restriction.
- 3.1.4 When embarking on a contractual or service agreement with a third party, the relevance of Federal records to the resultant partnerships shall be evaluated and addressed by requiring organization(s) as necessary, in consultation with the Center Records Manager.
- 3.1.5 This NPR establishes requirements to ensure records' reliability, authenticity, integrity, usability, and preservation content, context, and structure, as required by 36 CFR 1236. General requirements in NPR 7120.7 (currently NID 7120.99) require records management considerations to be addressed as part of the IT systems development project life cycle and in NASA's IT systems governance processes.
- 3.1.5.1 Managers/process owners over NASA offices should identify all systems or applications within their office that will contain Federal records. Such identification should be accomplished at the formulation of a new organization or NASA program or project.
- 3.1.5.2 In order to ensure the proper management, maintenance, and disposition of their records, Records Owners shall:
- a. Identify RM functional requirements for a system or application that is to house the records.

- b. Document administrative processes external to the system that will fulfill RM requirements in cases when a decision is made to use a system that fails to provide proper management of the records.
- 3.1.5.3 In accordance with NPD 1440.6 and NPD 2800.1, NASA System Owners are required to ensure that records controls are incorporated into any EIS that contain NASA records. Alternatively, controls may be integrated into a recordkeeping system or process that is external to the EIS itself.
- 3.1.5.4 System Owners and IT project managers shall address RM considerations and requirements in all projects utilizing the 7120.7 (currently NID 7120.99) IT Projects methodology, during which appropriate records management personnel (i.e., RLOs, Center Records Manager, or NASA Records Officer) should be consulted.
- a. Appendix C contains a "Records Management Core Element Checklist" which may be used as a tool for assessing basic RM functionality during the early conceptualization and planning phases of NASA IT systems development/acquisition/refresh projects, as defined in NPR 7120.7. A more detailed explanation of the origin, purpose, and use of the Core Elements Checklist can be found in IT-HBK-1440.01.
- b. When a decision during the early conceptualization and planning phase of an IT systems project is made to integrate RM capabilities into the design and development of a system itself, controls prescribed in 36 CFR 1236 shall be built into the system to ensure such properties as records' reliability, authenticity, integrity, and usability.
- c. More information about RM functionalities that must be included in systems and applications is provided in IT-HBK-1440.01, along with elaboration of RM touch points in the IT Projects Life-Cycle Governance process and definition of RM criteria for determining readiness of the system to advance from one project development phase to the next. The handbook provides an assessment tool for a more in-depth records analysis and assessment from which one of three architectural or strategy options may be determined for recommendation to the applicable IT Systems Project Governance Board.
- d. System Owners shall include costs of compliance with this NPR when developing the business case for a new or updated existing system.
- e. When a decision is made to not include RM functionality in a new or updated system, an alternate plan for managing records external to the system shall be developed and presented at appropriate review gates.

#### 3.2 Active Use Records Phase

3.2.1 Records Management roles during the active use phase of a records life cycle are those that help ensure or facilitate ease of access to record information for ongoing business/mission uses. This section addresses requirements for identifying records, where they are located, facilitation of their retrieval, and their protection.

#### 3.2.2 Records accounting

- 3.2.2.1 To account for all the records for which an organization is responsible, a complete records listing shall be created and maintained by each organizational unit RLO. This listing is sometimes called a "records plan," "file plan," "Master Records Index (MRI)," or other similar names, in accordance with Center policies. These listings describe all the records series belonging to the organizational unit.
- 3.2.2.2 The listing should include the following minimum important information about each record series:
- a. Agency Filing Scheme (AFS) code. (Reference Appendix D.)
- b. Title or summarized description.
- c. Owning organization.
- d. Records custodian.
- e. Location (if paper/physical media records) or system/repository (electronic/digital media records) where records reside, even if in an EIS located at or run by another organization or Center.
- f. Pertinent NRRS or GRS retention schedule item.

#### 3.2.3 Organizing records

- 3.2.3.1 A classification scheme (the AFS or its derivative) that can be used to logically categorize records holdings based on function or business process should be developed by each Center Records Manager or organizational unit RLO:
- a. For physical records, this scheme is used to organize record holdings in file cabinets, file rooms, or temporary records storage/staging facilities.
- b. For electronic records, the scheme is used in folder/directory structures and/or as keyword or metadata tags to accomplish the same purpose.

#### 3.2.4 Locating records

- 3.2.4.1 Effective indexing and search methodologies that facilitate locating and retrieving records shall be implemented by Records Owners. Indexing/search approaches include, but are not limited to:
- a. Metadata tagging and keyword indexing such as AFS and/or other key identifying attributes that will be usable even after the records' active life has expired.
- b. Database search capabilities using either metadata/keyword tag criteria, full-text search, or a combination of both.
- c. "Federated search" technologies (allowing records to be located using any of the above methods across multiple repositories, Line of Business (LOB) systems and locations).

#### 3.2.5 Protection and management of records

- 3.2.5.1 Proper RM controls that ensure records are managed and protected against unauthorized access, change, or destruction shall be established and documented by Records Owners in their office procedures for hard copy records or system IT security plan for electronic records. Controls will include, but not be limited to:
- a. Roles based access controls (i.e., user access to a system or its functionalities based on the role of the user).
- b. Safe and environmentally stable storage conditions to protect the record from unauthorized access, deterioration, other alteration, or destruction, with backup and restoration plans for records in EIS.
- c. Controls to ensure no one may destroy records outside of authorized channels and that destruction is accomplished only in accordance with approved records retention schedules.
- 3.2 5.2 Records may not be removed from the Agency, except in the course of official business or scheduled records disposition.
- (a) A records clearance process for all outgoing NASA personnel, including management, shall be implemented by Center Records Managers to ensure proper transition of any records custody and prevent unauthorized removal of Federal records. The process should ensure officials and employees do not remove records from the Agency without Center Records Manager or NASA Records Officer approval, in accordance with 36 CFR 1222.18, except in the course of official business.
- (b) Unauthorized removal of records from the Agency shall be reported following the procedural requirements set forth in 3.6.3.3.

#### 3.2.6 Converting analog records to digital

3.2.6.1 When a NASA organization has a business need to convert legacy analog (paper/film) records to digital formats, the Records Owner and the Center Records Manager shall ensure the conversion is to NARA-preferred formats whenever possible and always in the case of permanent records. Records owners and Center Records Managers should consult the most current NARA preferences and/or format requirements published on its agency's Web site.

#### 3.2.7 Identification, protection, and availability of essential/vital records

3.2.7.1 Identification, protection, and availability of essential/vital records in case of emergencies shall be ensured by Records Owners, working with Vital Records Managers, in accordance with 36 CFR 1223, NPR 1040.1, NASA Continuity of Operations (COOP) Planning Procedural Requirements and NPR 9660.1, Vital Financial Records for Emergency Operations.

#### 3.2.8 Records of terminated projects or offices

3.2.8.1 In cases where organizations, programs, or projects terminate and records are not being transferred to another ongoing office, managers should follow Center procedures or Center RM direction for disposition of records that have not yet met their retention. Programs and projects may see IT-HBK 1441.01 for records disposition guidance.

#### 3.2.9 Inter- or Intra-agency records transfers and loans

3.2.9.1 NASA Form NF-1786, Inter- or Intra-Agency Transfer of NASA Records Agreement, shall be completed by Records Custodians and associated Center Records Managers when there is a business need for custody of records to be transferred from one NASA Center, directorate, program/project office or business office to another, or from NASA to another Agency.

Note: Instructions for completing the form are on NF-1786.

3.2.9.2 When the Receiving Office represents a NASA Program/Project, and the records are received from another NASA Program/Project, the manager of the Receiving Office shall:

- a. Maintain the records in such a manner so as to retain the identity of the originating Program and/or Project.
- b. Disposition the records in accordance with the approved retention schedule indicated in the NF-1786 agreement when the records are no longer needed for active use.
- (1) When the retention instructions are dependent upon Program completion, the completion date of the originating Program/Project shall be the disposition contingency date or records "cutoff" point discussed later in this chapter.
- 3.2.9.3 If the required transfer of custody is between two organizational units within a Center (or HQ), the Center or Headquarters Records Manager shall document the transfer using locally established policies and procedures.
- 3.2.9.4 There are occasions when Center history functions, Communications, or other offices have cause to loan records for displays or holdings by other repositories.
- a. NASA may loan temporary records without NARA approval in accordance with 36 CFR 1228. However, Center Records Managers shall ensure that such loans are documented in agreements between the loaning and receiving organizations that specify what records are being loaned, the duration and other conditions of the loan, and responsibilities for maintenance and return of the records.
- b. Any loan of permanent records outside of the Agency must be coordinated with Center Records Manager and approved by NARA, in accordance with 36 CFR 1218. Center Records Managers shall ensure conditions of the loan are documented in an agreement, to which NARA is a party, that specifies the records to be loaned, the conditions and duration of the loan, and how the records are to be

maintained and returned.

#### 3.3 Inactive Records Phase

- 3.3.1 If records (permanent or temporary) have fulfilled their active usefulness, but have not yet fulfilled their retention period, the Records Custodian shall coordinate with the Center Records Manager to determine the available records storage options and costs for storing the records until their retention period is fulfilled and they are due for disposition.
- 3.3.2 If permanent records have fulfilled their active use and have no further value to the Agency, the Records Custodians may coordinate with the Center Records Manager to initiate an early transfer to the National Archives. (See Disposition of Permanent Records in Section 3.6.4.)
- 3.3.3 In cases where organizations, programs, or projects terminate, records disposition may follow one of two processes. Programs and projects may see IT-HBK 1440.01 for program records disposition guidance.
- a. If records are transferring to another ongoing office, Records Custodians should follow requirements to document an Intra-Agency transfer. (See Section 3.4.9)
- b. If records are not transferring to another ongoing office, Records Custodians should follow Center procedures or Center RM direction for disposition of records in Sections 3.5.1 or 3.5.2.

#### 3.3.4 Storage of inactive digital records.

- 3.3.4.1 The Center CIO shall provide guidance for periodic migrations to update both format and media of Center digital records so records remain retrievable throughout their life cycle. The National Archives and/or industry standards for migrating media should be consulted, particularly in the storage of permanent records.
- 3.3.4.2 Inactive digital records, regardless of whether of temporary or permanent retention value, shall be periodically migrated to current formats and/or systems by System Owners, in accordance with guidance from the Center CIO, to ensure the records are retrievable for the entire duration of their retention period, and so the Center is able to respond to any requests for the inactive records. This applies to records stored onsite or offsite at a Federal Records Center (FRC) or commercial storage facility.
- 3.3.4.3 There are several optional approaches for storing inactive digital records.
- a. Online. Records Custodians may continue to maintain inactive records within the system where they reside until their retention period is fulfilled. If the system has some inherent RM functionality, retiring records may simply be a matter of changing the life-cycle phase state from active to inactive through the use of metadata tagging.
- b. Offline or Nearline. Retirement of records to offline or nearline storage in order to avoid bogging down systems with unused records is often preferable and permissible as long as they are retained in such a way, including migration, that they may be located and retrieved in response to such need by the Agency.
- c. Physical Media. Inactive digital or analog records may be moved to physical external media (e.g., removable hard drives, tapes, Compact Disc (CD), Digital Video Disc (DVD) for storage during completion of their retention period. However, Records Custodians/Records Owners shall ensure migration to current media to ensure records

retrievability.

3.3.4.4 Records Custodians or Records Owners should utilize "cutoff points" based on the appropriate retention schedules, at which to take appropriate action to convert the records to an inactive state. Examples of cutoff points are project closeout, system decommissioning, contract final payment, or employment termination.

#### 3.3.5 Storage of inactive paper or other physical records

- 3.3.5.1 A standard process for storing paper or other physical records shall be established by Center Records Managers with procedures for controlling records inventory, box or file retrieval, check-out/check-in, and disposition/destruction services.
- 3.3.5.2 Basic standard procedures are provided in IT-HBK 1441.01, Records Retention and Disposition, for retiring hardcopy records to the FRC which Center Records Managers may enhance with Center unique requirements.

Note: No transitory or nonrecord collections may be retired to an FRC, except through special agreement with NARA.

#### 3.3.6 Tracking inactive records

- 3.3.6.1 Necessary records retirement documentation shall be completed by Records Custodians and/or RLOs, in coordination with their Center Records Manager in the preparation of a request to transfer or retrieve records.
- a. Typical documentation may include a Center form, Standard Form (SF) 135, or online requests to transfer or retrieve records through NARA's online Archives and Records Centers Information System (ARCIS).
- b. The records need to be accurately and adequately described in the transaction to ensure proper scheduling and retrieval, as necessary.
- 3.3.6.2 NARA ARCIS accounts and permissions may be provided by Center Records Managers in accordance with Center policy and procedures.
- 3.3.6.3 More detailed or standardized procedures and processing instructions for retirement of records to FRCs are provided in IT-HBK 1441.01, Records Retention and Disposition. The handbook includes details such as:
- a. Authorized boxes/containers and packing instructions.
- b. Shipping instructions.
- c. Procedures for documenting chain of custody.

#### 3.4 Records Disposition Phase

3.4.1 Disposition of records takes place after the inactive/retention phase is complete and records have fulfilled their full prescribed retention period. Disposition takes one of two forms, depending on whether the records are of deemed temporary or permanent value. Temporary records are destroyed; permanent records are transferred to the National Archives for permanent retention.

#### 3.4.2 Retention Schedules

- 3.4.2.1 All NASA records shall be dispositioned only in accordance with NRRS 1441.1 or the GRS by Records Custodians or Records Owners.
- a. NRRS 1441.1, NASA Records Retention Schedules, provides records descriptions and retention/disposition instructions for records unique to NASA. These retention schedules are approved by the Archivist of the United States and provide legal authority for disposition of the records. The schedules provide titles, descriptions, retention/disposition instructions, and the disposition authority for series of NASA records.
- b. NARA's GRS provides records descriptions and retention/disposition instructions for records common to multiple agencies. Retentions in the GRS always require compliance, unless NASA requires the records for a longer period of time, in which case, the Agency submits our own retention schedule for approval by NARA and incorporation into the NRRS. For NASA users' convenience, the NRRS incorporates GRS schedule items identified as records NASA maintains. In those cases, the GRS is cited as the disposal authority in brackets beneath retention/disposal instructions within the NRRS.
- 3.4.2.2 If an approved retention schedule cannot be identified in either the NRRS or the GRS for a set of records, the records are considered unscheduled and shall be maintained as permanent pending the approval of a retention schedule. (Reference Section 3.6.5.3 for proposing a new/revised NRRS schedule.)

#### 3.4.3 Disposition of Temporary Records

3.4.3.1 Most NASA records are of temporary value (i.e., they will eventually be destroyed/deleted) and the retention period is largely based on the Agency's business and legal need for them. This section contains requirements for

both scheduled destructions and instances of unauthorized damage, destruction, or removal of records.

#### 3.4.3.2 Scheduled destruction.

- a. Suitable local procedures for routine/periodic reviews shall be developed and implemented by Center Records Managers to identify and initiate purging of redundant and unneeded records. In developing and implementing these disposal procedures, the following factors should be considered:
- (1) The ever-increasing volume of the organization's collected records and the resulting impacts on the ability to easily find/retrieve critically needed information.
- (2) Risks and legal liabilities associated with possessing and possibly having to produce unneeded/redundant records for investigations or litigation.
- (3) Risks and legal liabilities associated with possession of unneeded/redundant restricted access information and potential breaches of Privacy, IT Security, Export Control, or other statutory and regulatory provisions.
- (4) Additional difficulties and consequences of establishing records integrity/authenticity.
- (5) Costs of storing and maintaining records (including not only storage technology costs, but also IT staff resource costs to develop and support the organization's information storage infrastructure).
- b. Center Records Managers shall develop local destruction authorization procedures for temporary records that have met their scheduled retention requirements and are stored in FRCs or commercial or Center storage. These procedures should address the following elements:
- (1) Initiation of the request for destruction authorization by the responsible RLO, custodian, or Records Owner.
- (2) A description of the record set and/or listing of individual records for which destruction authorization is being requested.
- (3) Identification of the applicable NRRS or GRS item authorizing destruction.
- (4) Concurrence by the applicable manager(s) of the organizational unit owning the records or, in the case of dismantled organizations, managers of the most logical office concerned with similar records.
- (5) Concurrence by Center Records Manager.
- (6) Concurrences by the Office of General Counsel (OGC) or Center Office of Chief Counsel (OCC), and/or other higher management official, as required by Center policy.
- (7) Instructions for how to handle records that are under a legal hold (destruction freeze). (Reference Chapter 4 of this NPR.)
- 3.4.3.3 Unauthorized damage, destruction, or removal of records.
- a. Agencies are required by 36 CFR 1230 to promptly report any unlawful/unauthorized or accidental removal, defacing, alteration, or destruction of records in the custody of that agency.
- b. Regardless of the circumstances, as soon as damage, destruction, or removal is discovered, the Center Records Manager shall immediately provide the NASA Records Officer with initial notification of the incident with as much detail as is known.
- c. The Center Records Manager shall provide the same immediate initial notification to their local NASA OIG when the incident involves any suspected unlawful or unauthorized removal, defacing, alteration, or destruction of records. The OIG will instruct the Records Manager as to any additional information required.
- d. The Center Records Manager shall quickly gather necessary details and work with the Records Owner to draft a report that will go to NARA, forwarding the draft to the Records Officer. Further assistance for preparing such reports is provided in Appendix F, "Unauthorized Records Destruction Reporting Guidance."
- e. After review and refinement, the NASA Records Officer shall submit the report of the incident to NARA in accordance with 36 CFR 1230.14.

#### 3.4.4 Disposition of Permanent Records

- 3.4.4.1 Records appraised by NARA as having historical significance and necessary to preserve NASA's legacy are deemed permanent and so indicated in the NRRS. These records are eventually transferred to the National Archives for permanent retention. General permanent records transfer procedures, including some that are specific to transfer of paper and other analog/physical media permanent records, are provided in NARA bulletins and guidelines, available on NARA's Web site (www.archives.gov/records-mgmt/bulletins).
- 3.4.4.2 All NASA transfers of permanent records shall be initiated by a Records Custodian or Center Records Manager via a Transfer Request (TR) in NARA's Electronic Records Archives (ERA). The TR will become the

complete documentation of the transfer.

Note: Pertinent hyperlinks to information on ERA and instructions for creating a TR are available on the NASA RM Web site (http://inside.nasa.gov/ocio/information/info\_recmgmt/index.html).

- 3.4.4.3 For electronic records, NARA's most recent guidance for transfer of permanent electronic records shall be followed.
- 3.4.4.4 In certain circumstances, NARA authorizes transfer of specifically designated collections of NASA permanent records to other archival/historical entities (e.g., Library of Congress, University Libraries, and Presidential Libraries). In such situations, the NASA Records Officer shall work with NARA and the designated receiving organization to develop transfer procedures that are agreeable to all parties.
- 3.4.4.5 When transferring records, the transferring organization may retain a copy of the permanent records for local use with the following considerations:
- a. The record copies should be clearly marked as "reference" to prevent the Center from attempting to transfer the records again at a later date.
- b. The Records Owner or relevant NASA Center must produce any copies of records in response to Freedom of Information Act (FOIA) or legal discovery requests.

#### 3.4.5 Creation, Use, and Maintenance of NRRS

- 3.4.5.1 The NRRS 1441.1 shall be published and maintained within NODIS by the NASA Records Officer, in conjunction with the OCIO Directives Manager and/or the NODIS administrator. This includes publishing updates of the NRRS when "administrative changes" are made to a schedule item for which only notification to NARA is required rather than formal approval by the Archivist.
- 3.4.5.2 Local procedures for notification of Center personnel of NRRS updates shall be established by Center Records Managers. Possible techniques/processes for this purpose include:
- a. Posting links to NRRS 1441.1 on Center Records Manager Web pages.
- b. All employee or RLO e-mail distribution.
- 3.4.5.3 NRRS Schedule Changes. a. Proposals for new or revised retention schedules shall be submitted, as necessary, by Center Records Managers to the NASA Records Officer for NASA coordination, if needed, and NARA approval.
- b. For unscheduled records (i.e., records for which no retention schedule can be identified), a new retention schedule shall be proposed by the Records Custodian or RLO in coordination with their Center Records Manager.
- c. The Records Custodian or RLO should initiate required updates to NRRS 1441.1 in a timely fashion to ensure accurate and approved retention/disposition authorities for their records.
- d. Reference Appendix E for more detailed steps in the process for making changes to the NRRS.

### **Chapter 4. Legal Holds**

#### 4.1 Purpose of Legal Holds

4.1.1 This chapter provides NASA requirements concerning the retention of record and nonrecord documents, including Electronically Stored Information (ESI), related to discovery or other litigation-related purposes. A "legal hold" is the procedure for identifying and ensuring the preservation of record and nonrecord materials that are or might become relevant to pending or potential litigation. A legal hold overrides any records retention schedule or any other agency policy that may otherwise call for the transfer, disposal, or destruction of the documents or ESI described in the legal hold until the hold has been removed by the entity that issued the hold.

### 4.2 Authority to Issue Legal Holds

- 4.2.1 Numerous situations arise where Government records and nonrecord material may be required for litigation, an administrative procedure, an audit or an investigation, or for response to Congressional and public inquiries. A legal hold may be issued by the following NASA entities:
- a. The Office of the General Counsel (OGC) may issue a legal hold for any documents or ESI within the Agency.
- b. The Office of the Chief Counsel (OCC) for any NASA Center may issue a legal hold for any documents or ESI stored at the Center for which that OCC has responsibility.
- c. The NASA or pertinent Center FOIA Officers may issue a notification of a records hold as required to meet FOIA requirements.
- d. The NASA OIG may issue legal holds in connection with OIG or Government Accountability Office (GAO) financial, performance, contract, or grant audits or in connection with an administrative or criminal investigation conducted by OIG.

#### 4.3 Records and Other Documentary Materials Subject to Holds

4.3.1 Legal holds may be imposed on NASA programmatic and operational records, as well as nonrecord materials, in all media. In case of such holds, often those issuing the hold refer to all relevant information as "records" even though nonrecords are included in the hold.

### 4.4 Legal Holds Requirements

- 4.4.1 Entities or individuals receiving legal holds shall comply with the requirements of those legal holds, including guidelines concerning the scope and method of searching for, retaining, or providing materials in response to litigation- or investigation-related requests.
- 4.4.2 When NASA is required to implement a legal hold relating to discovery or other litigation-related purposes, the OGC or Center OCC shall coordinate with the appropriate Center Records

Manager, and the NASA Records Officer when multiple Centers are involved, to implement preservation and discovery protocols appropriate to the purpose for which the legal hold is instituted and consistent with applicable legal authority.

# Chapter 5. Requirements for Management of Records in E-mail, Cloud, and Social Media

#### 5.1 Determining Records in Electronic Formats or Media

- 5.1.1 Electronic content may constitute a Federal record if it meets the definition of records, regardless of whether it takes the form of an e-mail or other electronic communication such as a text or instant message, or if the content was created using social media applications internal and external to the Agency, including collaborative environments.
- 5.1.2 Content generated using communication or social media applications is likely a Federal record if there is an affirmative answer to one or more of the following non-exhaustive list of questions when considered in conjunction with the definition of Federal records:
- a. Does it contain evidence of the Agency's policies, business, or mission?
- b. Is the information available only on the social media site?
- c. Does the Agency use the tool to convey official Agency information?
- d. Is there a business need for the information?
- 5.1.3 Employees should consult with their Center Records Manager when in doubt as to whether content constitutes record material. The default assumption should be that it does constitute record(s).

#### 5.2 Managing Information in Cloud Computing

- 5.2.1 If NASA information/data processed or maintained via cloud services meets the definition of a Federal record, RM functionality is required in the cloud environment, or alternative plans should be established for meeting records requirements.
- 5.2.2 If the cloud is used only as space in which the Agency is storing data and performing functions with the data using non-cloud furnished capabilities, then RM functionality does not need to be addressed in the agreement. However, issues that should be addressed before entering into a cloud initiative agreement include such things as cloud environment security in compliance with NASA IT security policies and the destiny of any Agency data/records stored therein should the cloud provider cease operation.
- 5.2.3 NASA Service Executives establishing service-level agreements for cloud initiatives shall consult their Center Records Manager in considering whether an agreement should include records management requirements.

#### 5.3 Managing Social Media Content

5.3.1 Social media should not be used external to the Agency for creation or posting of content that rises to the definition of Agency records unless, in consultation with the Center CIO, a plan is established for how the records will be harvested or captured and managed by the Agency in accordance with the NRRS. 5.3.2 When internal social media applications contain NASA records, application owners shall either provide RM functionality that provides the controls required by 36 CFR 1236 and the functionalities discussed in IT-HBK-1440.01, or establish written procedures that are approved by the Center Records Manager for how the records will be managed and disposed of in accordance with the NRRS.

#### 5.4 Managing E-Communications Records

- 5.4.1 The content and metadata of e-mail messages created and used in the conduct of official Agency business are considered official Federal records if the information content meets the definition of Federal records as described in Section 1.1. See Table A for basic criteria to assist with determining which messages are records. There are many messages that may be sent or received by NASA employees that do not conduct Agency business and, therefore, are nonrecords. Based on content and use of the e-mail, the following decisions need to be made:
- a. Whether a message constitutes a record and, if so,
- b. Suitable retention for the message before disposition.
- 5.4.2 Table A provides basic criteria to aid individuals and offices in determining the record status and retention of their messages. However, NRRS 1441.1, NASA Records Retention Schedules, is always the authoritative source for retention.
- 5.4.3 NASA utilizes a "Capstone" approach to capture and manage e-mail records in accordance with NARA-issued Bulletin 2013-02. Using this approach, the Agency categorizes and schedules all e-mail of certain senior managers, based on the work and/or position of the e-mail account owner.
- 5.4.4 In NASA's implementation of this Capstone approach, the following are required:
- a. Each Center Records Managers shall maintain an up-to-date list of senior managers whose e-mail records are permanent as described by NRRS 1/22.A.1 or NRRS 8/101. With concurrence of the NASA Records Officer, updates to the senior management list are provided to the Agency e-mail service provider as Center personnel changes occur. The list may be found under "Electronic Records Management" on the internal NASA Records Management Website.
- b. The NASA CIO shall require the e-mail service provider to capture the e-mails and accompanying metadata of Capstone e-mail account holders specified by Center Records Managers or the NASA Records Officer and, upon a manager's departure, provide their records for transfer to the National Archives.
- 5.4.5 For all other NASA users, e-mail messages that are either of nonrecord or transitory value may be allowed to reside in the NASA Operational Messaging and Directory Service (NOMAD) e-mail system, and may be destroyed after 180 days, if not subject to legal hold.

Table A. Basic Criteria Determining E-mail Record Status and Retention

| Basic Criteria for Determining E-mail Record Status and Retention   |                      |   |  |  |
|---|----------------------|---|--|--|
| If e-mail message is:   | NRRS<br>Citation     | Series Title  | Disposition  | How to Handle  |
| Strictly personal or non-<br>business related   |                      | Non-record (personal or of a non-NASA nature)   | Destroy Immediately or when no longer needed   | Destroy at will or<br>after 180 Days   |
| Business related, but of little<br>or no substantive value  | 1/78G                | Transitory Files (minimal or no documentary or evidential value)  | Destroy immediately or when no longer<br>needed for reference, or under a<br>predetermined schedule or business rule | Destroy after 180<br>Days  |
| Related to employee's NASA<br>function & not covered by<br>another specific retention<br>schedule         | 1/78F.2              | Administrative Records for NASA Function  | Cut off at end of fiscal or calendar year.<br>Destroy/delete 5 years after cutoff.                                   | Destroy 5 years after<br>cutoff  |
| Related to employee's NASA function e-mail content has its own schedule – See "Series Title" column.      | Various<br>Schedules | Whatever series governs records to which the content of the e-mail is related (e.g., Project Mgmt, Contract direction, etc.)  | Varies, depending on the appropriate schedule item   | Follow specific retention instruction:   |
| Business related and created<br>or received by Senior<br>managers described in NRRS<br>1/22A.1.           | 1/22A.1              | Records of Top Management Officials<br>(Administrator, Center Directors, deputies &<br>associates who help execute the functions of the<br>Administrator and Center Directors; and heads of<br>Agency or Center Mission Directorates or other<br>direct mission support offices.) | Permanent  | Transfer to NARA when 10 years old.  |
| Business related and created<br>or received by heads of other<br>offices as described in NRRS<br>1/22A.2. | 1/22A.2              | Records of Top Management Officials (Heads of all other offices, e.g., functional offices concerned with Agency or Center infrastructure and administration, such as CIO, CFO, Human Capital, Facility Operations organizations, etc.)  | Temporary  | Cut off at end of<br>fiscal or calendar<br>year. Destroy/delete<br>between 5 and 15<br>years after cutoff. |

- 5.4.6 The Agency has implemented a two-pronged approach for managing all other NASA users' e-mail records (with longer than 180-day retention) as follows:
- a. The NASA CIO shall identify and implement an Agency-wide recordkeeping solution to properly manage and dispose of e-mail records, using a traditional records management approach or the Capstone approach of position-based retention.
- b. Until such time as the CIO implements an automated NASA e-mail records solution, individual users shall maintain e-mail records of longer duration than transitory (180 day retention) value in accordance with the retention schedule appropriate to the subject and content of the message. Their content and attachments are to be captured by the individual user, together with date/time sent and distribution metadata, and retained in the same system in which their related non-e-mail official records are stored or in systems/locations where their protection, retention, and recovery can be ensured. These messages may be captured and stored in Outlook Personal Storage Table (PST) files or Portable Document Format (PDF) files, as approved by the Center RM. PST files (personal folders) are located on a user's personal and/or network storage device that require regular backups. Messages are saved in PDF using "File-Save" or "File-Print" (select Adobe PDF as the printer) options from the e-mail. When saved as a PDF file, the user must also ensure preservation of any attachment(s).
- 5.4.7 NASA business communications that rise to the definition of Agency records of retention value greater than 180 days shall not be created using instant messaging and text messaging services. In the event that communication of longer retention value is created, the sender and recipient have responsibility for capturing the content of and attachments to the message, together with date/time sent and distribution metadata, and saving it in the same system in which their related non-e-mail official records are stored or in systems/locations where their protection, retention, and recovery can be ensured.

### Appendix A. Definitions

**Active records.** Records that are referred to on a frequent basis, i.e., daily or weekly, and are maintained in office files for immediate access, use, and reference. Also considered current records, which are **necessary** for conducting the business of an office.

**Appraise, Appraisal.** The process of determining the value and, thus, the disposition of records based upon their mission or business/administrative and other uses, their evidential and informational or research value, their arrangement, and their relationship to other records.

**Authenticity.** See Record Authenticity. Capstone. For purposes of NASA records management, an approach utilized by NASA Records Managers to capture and manage substantive e-mails by selecting the e-mails of certain managers, based on the work and/or position of the e-mail account owner.

**Case file.** A folder or other file unit containing materials relating to a specific action, transaction, event, person, place, project, or other subject. A case file may include many different individual records or groups of records that all relate to the case. For example: a contract file contains records on a specific contract, such as the solicitation, proposal, correspondence, addenda, reports, and processing information. Other types of case files include personnel actions, surveys, investigative files and studies.

**Cloud computing**. Technology that allows users to access and use shared data and computing services via the Internet or a Virtual Private Network. It gives users access to resources without having to build infrastructure to support these resources within their own environments or networks.

**Cutoff.** To break or end active use of records at regular intervals to facilitate continuous disposal, retirement, or transfer of the file/record series, i.e., monthly, yearly, five year blocks. Disposition instructions typically indicate how often the records are cut off and separated from active records.

**Destroy.** Physical destruction or complete deletion of records; any act which effectively obliterates the informational content of records, such as unauthorized removal of Government documents, tearing up, burning, pulping, erasure (tapes/diskettes/disks).

**Disposition.** Actions taken with regard to inactive records when they have fulfilled their retention schedule period. The actions include retirement to a records center for temporary storage, transfer to NARA, donation (with NARA approval) to an eligible repository, reproduction via digitization, and destruction. A records disposition may include two or more of these actions, such as retirement after one year to a records center, with retention for five years and then destroy when six years old.

**Electronic Information System (EIS).** Any electronic data/information system or application that allows creation, storage, or retrieval of electronic data or records. See also INFORMATION SYSTEM.

**Electronic record**. Record that is stored in a form that only a computer or computer-driven device can process (sometimes also called machine-readable).

**Electronically Stored Information (ESI).** Data that is created, altered, communicated, and stored in digital form.

**Essential records.** Information systems and applications, electronic and hardcopy documents, references, and records needed to support essential functions during a continuity event. The two basic categories of essential records are emergency operating records and rights and interest records. Emergency operating records are essential to the continued functioning or reconstitution of an organization. Rights and interest records are critical to carrying out an organization's essential legal and financial functions and vital to the protection of the legal and financial rights of individuals who are directly affected by that organization's activities. The term "vital records" refers to a specific sub-set of essential records relating to birth, death, and marriage documents.

Federal Records. See RECORDS.

**Federal Records Center (FRC).** A records storage facility operated by NARA for housing and servicing inactive and semi-active records of the Federal government.

**File.** (1) An accumulation of records maintained in a predetermined physical arrangement. (2) Storage equipment, such as a filing cabinet.

**File plan.** A detailed list or inventory of the individual files or file categories within a classification scheme. A file plan allows for the systematic identification, filing, and retrieval of records.

**General Records Schedules (GRS).** A comprehensive listing of records common to several or all Federal agencies, together with retention schedules, issued by NARA and governing the disposition of specified recurring series of records.

Immutability. Unchanging over time or unable to be changed. Inactive records. Records that are no longer required

or which are referred to so infrequently in the conduct of current business that they may be removed from the office and either retired to inactive records storage (e.g., an FRC or other approved storage space) or destroyed, depending on the approved disposition.

**Information owner.** Agency official or organizational unit responsible for the process to which the record information pertains and, thus, having statutory or operational authority for specified information and the responsibility for establishing requirements for controlling the information's generation, collection, processing, dissemination, and disposal. Same as RECORDS OWNER.

**Information system.** A discrete set of information resources organized for the creation/collection, processing, storage and maintenance, transmission, and dissemination of information, in accordance with defined procedures, whether automated or manual. See also ELECTRONIC INFORMATION SYSTEM.

**Information system owner.** The official responsible for the overall procurement, development, integration, modification, or operation and maintenance of an information system to meet requirements for managing the information it contains. The system owner may or may not be the same as the information owner.

Integrity. See Record Integrity.

**Inventory.** A systematic listing of all records series in an office or an agency generally including the location of each series, physical characteristics, and description of content.

**Legal Hold.** The procedure for identifying and ensuring the preservation of record and nonrecord materials, regardless of format, that might be or might become relevant to pending or potential litigation.

**Long term retention.** Long term refers to a period of retention which can be anywhere from 10 years to 60+ years. Also see RETENTION PERIOD. Metadata. Contextual information that describes the history, tracking, and/or management of an electronic document.

**Nonrecord material.** Those Federally owned informational materials that do not meet the statutory definition of records (44 U.S.C. §3301) or that have been excluded from coverage by the definition. Includes materials such as extra copies of documents and correspondence that are kept only for convenience or reference, stocks of publications and processed documents, personal records, reference items, and library or museum material intended solely for reference or exhibition. Also see RECORDS.

**Office of record.** An office designated as the official custodian of records for a specified program, activity, or transaction of an organization. Under functional or decentralized filing plans, the Office of Record or Office of Primary Responsibility (OPR) is usually the office which created the record or initiated the action on an incoming record, unless otherwise designated. Official files. An accumulation of official records, regardless of format, documenting an action or providing valuable information.

**Permanent records.** Records appraised by NARA as having enduring value because they document the organization and functions of the Agency that created or received them, and/or because they contain significant information on persons, things, problems, programs, projects, and conditions with which the Agency dealt. These records are valuable or unique in that they document the history of the Agency and generally record primary missions, functions, responsibilities, and significant experiences or accomplishments of the Agency.

**Record Authenticity.** An authentic record is one that can be proven to be what it purports to be, to have been created/sent by the person/entity purported to have created or sent it, and to have been created/sent at the time purported. Controls to assure authenticity will protect records against unauthorized addition, deletion, alteration, use, and concealment.

**Record Integrity.** The property of an electronic record that assures it is complete and unaltered.

**Record Reliability.** A reliable record is one whose contents can be trusted as a full and accurate representation of the transactions, activities or facts to which they attest and can be depended upon in the course of subsequent transactions or activities.

Record Usability. A usable record is one that can be located, retrieved, presented, and interpreted.

**Records.** All books, papers, maps, photographs, negatives, machine readable materials, diskettes, microfilm, audio tapes, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the U.S. Government under Federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government or because of the informational value of the data contained therein. Machine readable materials include, but are not limited to, optical disk, magnetic tape, sound recordings, microforms, and any other such recording medium regardless of how produced. Also see NONRECORD MATERIAL.

**Records center.** (1) A facility for the economical storage and servicing of records pending their ultimate disposition. (2) An area or facility designated as a temporary staging area. Also see FEDERAL RECORDS CENTER.

**Records custodian.** A records custodian is an organization or individual designated by the Records Owner as having responsibility for physical and/or electronic storage and protection of records throughout their retention period. They may also have responsibility for records disposition, if so designated.

Records owner. SEE INFORMATION OWNER.

**Records retention schedules.** A document governing the NARA-approved mandatory retention period and authorized disposition of all records series of the Agency. Also known as a records schedule, records control schedule, records disposition schedule, retention schedule, or schedules. NASA's schedules are formally called NASA Records Retention Schedules (NRRS).

Reliability. See Record Reliability.

**Retention period.** The period of time that inactive records are required to be kept after cutoff or other external retention trigger (e.g., date of contract final payment) prior to their destruction.

**Retirement.** The movement of inactive records to a records center or some other authorized repository for storage until the expiration of their retention period.

**Schedule.** (1) Agency action to develop and obtain approval for a records retention schedule for a series of records. (2) An official agency action document listing the records series created by the agency. A schedule indicates whether each series of records is permanent or temporary and includes retention periods. Also see RECORDS RETENTION SCHEDULES.

**Semi-active records.** Records that are likely to be required only infrequently, e.g., not needed for day-to-day operations, in the conduct of current business. Semi-active records will normally be maintained in a records center or other offsite storage location pending their ultimate disposal. Also known as semi-current records.

**Series.** Files or information collections maintained as an aggregated set of individual records because they relate to a common subject or function, result from the same activity, or because of some other relationship arising out of their creation, receipt, or business use. All individual records within a Record Series are governed for retention/disposition purposes by the same Records Retention Schedule item. Sometimes known as a "record series."

**Social media.** Computer-based virtual communities and networks in which people interact in order to create, share, or exchange information, usually in an informal way. Common examples include wikis, blogs, social networks, photo libraries, virtual worlds, or video sharing sites.

**System administrator.** Person responsible for the maintenance, configuration, and reliable operation of computer hardware and information systems, including multi-user systems and file servers.

System owner. See INFORMATION SYSTEM OWNER.

**Temporary records.** Records approved by NARA via an authorized records schedule for disposal, either immediately after active use or after a specified trigger event or specified period of time after cutoff/retirement. An example of temporary records are Quality Management Review records that, in accordance with NRRS 1/Item 26.5B, may be destroyed when three years old or when no longer needed, whichever is sooner.

**Transfer.** (1) The movement of records from one owner to another. (2) The movement of records from Agency custody or ownership into the legal custody of NARA or other authorized repository.

**Transitory records.** A general term for those types of records that lose their value within a short period of time (180 days or less) and that should be separated during filing from records requiring longer retention or until the purpose for which it was created has been accomplished and the record can be destroyed. An example of a transitory record is a routine notification of an upcoming meeting, or a quasi-official notice such as an e-mail reminding an employee of the Combined Federal Campaign or Health Benefits Open Season. It may be destroyed at will.

**Usability.** See Record Usability.

Vital records. Specific sub-set of essential records relating to birth, death, and marriage documents.

**Vital records manager.** Individual designated by Center Directors and Director for Headquarters Operations to facilitate management of essential and vital records.

**Working papers**. Documents such as rough notes, calculations, or drafts, assembled or created and used in the preparation or analysis of other documents.

### Appendix B. Acronyms

AFS Agency Filing Scheme

ARCIS Archives and Records Centers Information System

CD Compact Disc

CFR Code of Federal Regulations

CIO Chief Information Officer

COOP Continuity of Operations

CUI/SBU Controlled Unclassified Information/Sensitive But Unclassified

DOD Department of Defense

DVD Digital Video Disc

EIS Electronic Information System

ERA Electronic Records Archives

ESI Electronically Stored Information

FOIA Freedom of Information Act

FRC Federal Records Center

GAO Government Accountability Office

GRS General Records Schedules

HBK Handbook

HQ Headquarters

IIF Information in Identifiable Form

IPTA Initial Privacy Threshold Analysis

ISO International Organization for Standardization

IT Information Technology

ITAR International Traffic in Arms Regulations

ITS Information Technology Security

JPL Jet Propulsion Laboratory, a Federally Funded Research and Development Center

LOB Line-of-Business

MRI Master Records Index

NARA National Archives and Records Administration

NASA National Aeronautics and Space Administration

NF NASA Form

NID NASA Interim Directive

NODIS NASA Online Directives Information System

NOMAD NASA Operational Messaging and Directory Service

NPD NASA Policy Directive

NPR NASA Procedural Requirements

NRRS NASA Records Retention Schedules

OCC Office of Chief Counsel

OCIO Office of the Chief Information Officer

OGC Office of the General Counsel

OIG Office of the Inspector General

OMG Object Management Group

OPR Office of Primary Responsibility

OMB Office of Management and Budget

PCAT Privacy and CUI Assessment Tool

PDF Portable Document Format

PIA Privacy Impact Assessment

PII Personally Identifiable Information

PWS Performance Work Statement

RLO Records Liaison Officer

RM Records Management

RMA Records Management Application

SAO Senior Agency Official

SF Standard Form

SORN System of Records Notice

SOW Statement of Work

TR Transfer Request (typically within ERA)

U.S.C. United States Code

USB Universal Serial Bus

## **Appendix C: Records Management Core Element Checklist**

| Records Management Core Elements/Services | Description of Core Elements/Services Capability   |
|---|--|
| Record Creation/Identification            | Will identify and distinguish "Record" data from "Nonrecord" data. Refer to "Record" definition.   |
| Metadata                                  | Captures information that describes the entity, contained in metadata element definitions, and divided into system metadata (defined by MoReq2010 <sup>®</sup> ) and contextual metadata (defined by the supplier and/or the user).  |
| Aggregation/Classification                | Facilitates systematic identification and arrangement of business activities and/or records into categories according to logically structured conventions, methods, and procedural rules represented in a classification system. (Defined by ISO 15489 as classification.) |
| Authenticity/Reliability/Integrity        | Ensures the following characteristics of records:  |
|   | thenticity the record is what it purports to be and was created by e person purported to have created it;  |
|   | eliability the information in the record is accurate and can be pended on; and   |
| • In                                      | tegrity the record is complete and unaltered. (Defined in ISO 489.)  |
| Retention/Disposition                     | Includes mechanism to ensure Records are retained for period specified in NRRS and then disposed of when authorized by NRRS.   |
| Legal Hold/Disposition Freeze             | Allows a disposition freeze to be placed on a digital record and associated metadata - or, where applicable, an aggregation of records - in order to prevent any disposition action from taking place for the duration of the freeze.                                      |
| Search and Reporting                      | Has capability to search for any entity type by any of its system or contextual metadata, including events.  |
| Export/Interoperability                   | Permits extract of a record or record series with associated metadata in formats usable by an external repository and/or to directly transfer records from one system to another.  |
| Record Event History/Audit<br>Trail       | Enables either metadata or audit trails to be kept as "complete and accurate representations of all transactions that occur in relation to a particular record" (ISO 15489-1:2001, 8.3.2) through all life-cycle phases.   |
| Role Services                             | Employs roles and specific system permissions for all system users and groups/classifications of users.  |

## **Appendix D: Agency Filing Scheme (AFS)**

This AFS is a listing of subjects of information that may be created by functional activities throughout NASA. Their corresponding numbers that appear in the first column have historically been used not only for numbering NASA policy documents, but also for filing of records and nonrecords in offices.

With the promulgation of almost entirely electronic records, the AFS will continue to be used for policy document numbering, but will also be useful as a metadata tag associated with records or data objects as they are created to serve as a search criteria element for location/retrieval of records.

| PRIMARY<br>SECONDARY<br>AND<br>TERTIARY<br>AFS# | FILE SUBJECT/SERIES DESCRIPTION                    |  |
|---|--|--|
| 1000 - 1999                                     | ORGANIZATION AND GENERAL ADMINISTRATION            |  |
| 1000  | General (e.g., NASA Strategic Plan)                |  |
| 1010  | Agency Establishment                               |  |
| 1011  | Legislative Authority                              |  |
| 1012  | Executive Authority                                |  |
| 1020  | NASA Seal, Insignia, Logotype, Identifiers, Flags  |  |
| 1022  | Names, Symbols                                     |  |
| 1030  | Honors and Ceremonies (Acceptance)                 |  |
| 1040  | Emergency Preparedness / Planning and Mobilization |  |
| 1041  | Civil Defense                                      |  |
| 1042  | Emergency Warden Organization                      |  |
| 1043  | Fallout and Fallout Shelter                        |  |
| 1044  | Casualty Reporting                                 |  |
| 1046  | Mobilization Readiness                             |  |
| 1050  | Agreements/Memoranda of Understanding              |  |
| 1054  | Foreign Governments                                |  |
| 1056  | Non - Government                                   |  |
| 1058  |  |  |
| 1060  | Consultants  |  |
| 1070  | History Program                                    |  |
| 1080  | Generate Knowledge                                 |  |
| 1090  | Communicate, Engage, Inspire Process               |  |

| 1100 | Organizational Structure  |  |
|------|---|--|
| 1101 | NASA Organization and Definition of Terms                                   |  |
| 1102 | HQ Institutional Program Office(s) and Enterprise Office(s) Organization    |  |
| 1103 | HQ Enterprise Office(s)   |  |
| 1104 | HQ Functional Office(s)   |  |
| 1107 | Center Organization (NASA Centers, Installations, and Component Facilities) |  |
| 1110 |   |  |
| 1120 | General Organization Responsibilities                                       |  |
| 1130 | Operating Relationships   |  |
| 1140 |   |  |
| 1150 | Committees/Boards/Councils/Panels/Working Groups                            |  |
| 1152 | Intra-Agency  |  |
| 1154 | Inter-Agency  |  |
| 1156 | Advisory Committees/Groups  |  |
| 1160 | Special Lines of Succession   |  |
| 1162 | Delegation of Authority To Act For The Administrator                        |  |
| 1170 | Inventions and Contributions Board  |  |
| 1180 | NASA Board of Contract Appeals  |  |
| 1190 |   |  |
| 1200 | Internal Management Controls  |  |
| 1210 | Fundamental Principles  |  |
| 1216 | Work Management   |  |
| 1220 | Role of General Management  |  |
| 1230 | Program Management  |  |
| 1240 | Functional Management   |  |
| 1250 | Institutional Management  |  |
| 1260 | Budget (Management of)  |  |
| 1270 | Productivity and Quality Enhancement - TQM                                  |  |
| 1271 | National Partnership for Reinventing Government                             |  |
| 1272 | Government Performance Results Act (GPRA)                                   |  |

| 1280 | Quality Management Systems                             |  |
|------|--|--|
| 1290 |  |  |
| 1300 | External Relationships                                 |  |
| 1305 | Guest Operations                                       |  |
| 1310 | Legislative Branch                                     |  |
| 1311 | Congress   |  |
| 1312 | Government Accountability Office (GAO)                 |  |
| 1313 | Government Printing Office (GPO)                       |  |
| 1314 | Library of Congress                                    |  |
| 1315 | Judicial Branch  |  |
| 1316 | Supreme Court of the United States                     |  |
| 1320 | Executive Branch                                       |  |
| 1321 | White House Referrals                                  |  |
| 1322 | Executive Office of the President (EOP)                |  |
| 1323 | Office of Management and Budget (OMB)                  |  |
| 1324 | Office of Personnel Management (OPM)                   |  |
| 1325 | Executive Agencies/ Departments                        |  |
| 1328 | Department of Defense                                  |  |
| 1330 | Independent Establishments and Government Corporations |  |
| 1340 | State and Local Government                             |  |
| 1350 | Nongovernmental Organizations                          |  |
| 1355 | University Affairs                                     |  |
| 1356 | General NASA University Policy and Relationships       |  |
| 1357 | Unsolicited Proposals from Universities                |  |
| 1358 | Functional Management of University Programs           |  |
| 1359 | University R&D Support                                 |  |
| 1360 | International Affairs/Programs                         |  |
| 1362 | Cooperative Projects                                   |  |
| 1365 | International Organizations                            |  |
| 1367 | Support of Overseas Operations                         |  |
| 1370 | Foreign Visits and Visitors                            |  |

| 1371 | Foreign Nationals Access to NASA  |  |
|------|---|--|
| 1373 | NASA Travel Abroad  |  |
| 1374 | International Internships, Fellows & Scholars   |  |
| 1376 | Foreign Visiting Researchers  |  |
| 1378 | Training of Foreign Nationals   |  |
| 1380 | Public Affairs  |  |
| 1382 | Control and Release of Information  |  |
| 1383 | Audio Visual News Material  |  |
| 1384 | Public Appearances  |  |
| 1385 | Speeches and Speakers   |  |
| 1387 | Exhibits  |  |
| 1389 | Conferences   |  |
| 1390 | Education Programs General  |  |
| 1392 | Educational Programs  |  |
| 1394 | Educational Services  |  |
| 1395 | Foreign Government Awards   |  |
| 1400 | Administrative Management Programs  |  |
| 1410 | Directives Management   |  |
| 1412 | Office of the Federal Register  |  |
| 1415 | Reports Management  |  |
| 1417 | Information Collection, Assessment and Clearance Management (Paperwork Reduction Act) |  |
| 1420 | Forms Management  |  |
| 1430 | Visual Aids Management  |  |
| 1440 | Records Management  |  |
| 1441 | Records Disposition   |  |
| 1442 | Files Maintenance   |  |
| 1450 | Correspondence Management   |  |
|      |   |  |
| 1451 | Executive Instructions on Correspondence  |  |
| 1451 | Executive Instructions on Correspondence  Mail Management                             |  |
|      |   |  |

| 1472 | Work Measurement & Simplification   |  |
|------|-------------------------------------|--|
| 1480 | Publications Management             |  |
| 1490 | Printing Management                 |  |
| 1500 | Administrative Services             |  |
| 1510 |                                     |  |
| 1520 | Graphics                            |  |
| 1521 | Visual Aids                         |  |
| 1530 | Postal Records                      |  |
| 1540 | Building and Grounds Management     |  |
| 1541 | Transportation and Parking Services |  |
| 1542 | Conference Rooms and Auditoriums    |  |
| 1550 | General Office Services             |  |
| 1551 | Internal Mail/Messenger Service     |  |
| 1552 | Clerical and Stenographic           |  |
| 1553 | Moving and Labor                    |  |
| 1560 |                                     |  |
| 1570 | Office Supplies                     |  |
| 1571 | Office Equipment and Furnishings    |  |
| 1580 | Telephone (Local)                   |  |
| 1590 | Miscellaneous Matters               |  |
| 1600 | Security                            |  |
| 1610 | Personnel Security                  |  |
| 1620 | Physical Security                   |  |
| 1630 | Control of Classified Information   |  |
| 1640 | Security Classifications            |  |
| 1650 | Industrial Security                 |  |
| 1660 |                                     |  |
| 1670 | Security Education                  |  |
| 1680 | Visitor and Foreign Travel Control  |  |
| 1690 | Security Surveys                    |  |
| 1700 | Safety                              |  |

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|-----------|---------------------------------------|
| 1701      | Basic Policy                          |
| 1710      | Safety/Accident Prevention            |
| 1711      | Accident Reporting & Investigation    |
| 1712      | Injury Reporting                      |
| 1720      | Accident/Mishap Reporting             |
| 1730      | Protective Clothing and Equipment     |
| 1740      | Safety Standards                      |
| 1800      | Occupational Health                   |
| 1810      | Professional Medical Services         |
| 1812      | Medicines                             |
| 1814      | Clinical Facilities                   |
| 1815      | Narcotics and Drugs                   |
| 1820      | Preventive Medicine                   |
| 1830      | Physical Fitness                      |
| 1840      | Industrial Hygiene                    |
| 1845      | Health Standards                      |
| 1846      | Toxicology                            |
| 1847      | Advisory Center on Toxicology         |
| 1850      | Space Medicine                        |
| 1860      | Radiological Health                   |
| 1870      | Environmental Sanitation              |
| 1880      | Entomology                            |
| 1890      | Disaster Medical Planning             |
| 1900      | Standards of Conduct                  |
| 1910      | Ethics                                |
| 2000-2999 | LEGAL AND TECHNICAL                   |
| 2000      | Laws And Legal Matters                |
| 2001      | General                               |
| 2010      | Litigation: Courts                    |
| 2011      | United States District Court          |
| 2012      | United States Court of Federal Claims |

| 2013 | United States Court of Appeals for the Federal Circuit                       |  |
|------|--|--|
| 2014 | Other Federal Courts   |  |
| 2015 | State Courts   |  |
| 2020 | Litigation: Administrative Proceedings                                       |  |
| 2021 | Comptroller General Cases  |  |
| 2022 | Board of Contract Appeals Cases  |  |
| 2025 | Alternative Dispute Resolution   |  |
| 2026 | Protests: Agency and Contracting Officer                                     |  |
| 2030 | Litigation: Procedural Matters   |  |
| 2031 | Subpoenas  |  |
| 2032 | Expert Witness   |  |
| 2033 | Depositions  |  |
| 2040 | Taxes, Customs, and Duties   |  |
| 2050 | Courts, Boards, and Arbitration Procedures and Rules                         |  |
| 2060 | Statutes and Legislation   |  |
| 2070 | Legal Opinion / Advice Files   |  |
| 2080 | Claims   |  |
| 2081 | Equal Opportunity Compliance   |  |
| 2082 | Tort Claims  |  |
| 2083 | Employee Personal Property Claims  |  |
| 2084 | Contract Claims  |  |
| 2085 |  |  |
| 2086 | False or Fraud Claims  |  |
| 2087 | Debt Claims  |  |
| 2088 | Garnishments   |  |
| 2090 | Intellectual Property  |  |
| 2091 | Inventions Made by Government Employee                                       |  |
| 2092 | Royalties Received by NASA   |  |
| 2100 | Technology Utilization (including Small Business Innovative Research (SBIR)) |  |
| 2110 | Programs and Policies  |  |
|      |  |  |

|      | http://flodis5.gstc.hasd.gov/              |  |
|------|--|--|
| 2120 | Flash Sheets                               |  |
| 2121 | Appraisal and Evaluating                   |  |
| 2130 | Tech Briefs                                |  |
| 2131 | Tech Briefs Distribution                   |  |
| 2140 | Patent Statements                          |  |
| 2150 | Reporting Industrial Applications          |  |
| 2160 | Information and Application Centers        |  |
| 2170 | New Technology Management                  |  |
| 2180 | Technology Transfer                        |  |
| 2190 | Export Control                             |  |
| 2200 | Scientific and Technical Information       |  |
| 2210 | External Release of NASA Software          |  |
| 2220 | Publications Program / STI Databases       |  |
| 2230 |  |  |
| 2240 | Library Program Activities                 |  |
| 2300 | Management Information Systems             |  |
| 2305 | General Policies and Procedures            |  |
| 2310 | Information Resources Management           |  |
| 2314 | Documentation Management Systems           |  |
| 2320 | Presentations and Reviews (Management)     |  |
| 2330 | Planning and Scheduling Systems            |  |
| 2332 | NASA PERT and Companion Cost               |  |
| 2334 | Line of Balance                            |  |
| 2336 | Milestone Systems                          |  |
| 2340 | Project Status Reporting                   |  |
| 2400 | AUTOMATIC DATA PROCESSING (ADP) MANAGEMENT |  |
| 2410 | Policies and Procedures                    |  |
| 2415 | Computer Program Documentation             |  |
| 2420 | Data Reduction and Interpretation          |  |
| 2430 | Equipment Utilization and Control          |  |
| 2440 | Data Display                               |  |
|      |  |  |

| 2450      | Personnel Management                   |  |
|-----------|--|--|
|           | Personnel Management  Communications   |  |
| 2500      | Communications                         |  |
| 2510      | General                                |  |
| 2520      | NASA Communications System             |  |
| 2530      | Telecommunications and Messages        |  |
| 2540      | Administrative Communications          |  |
| 2550      | Cryptography                           |  |
| 2570      | Radio Frequency Management             |  |
| 2600      | Photographic Services Management       |  |
| 2610      | Equipment, Supplies, and Attachments   |  |
| 2620      | Photographic Instrumentation           |  |
| 2630      | Photography Services                   |  |
| 2640      | Projectors and Operator Services       |  |
| 2700      |  |  |
| 2800      | Information Technology (IT) Management |  |
| 2810      | IT Security                            |  |
| 2820      | NASA Software Policies                 |  |
| 2830      | NASA Enterprise Architecture           |  |
| 2840      | IT Outsourcing / Insourcing            |  |
| 2850      | Information Technology (IT) Services   |  |
| 2851      | Web Services                           |  |
| 2852      | Cloud / Data Center Services           |  |
| 2853      | End User Services (EUS)                |  |
| 2854      | Enterprise Applications                |  |
| 2855      | Service Desk Services                  |  |
| 2856      | Communications Technology Services     |  |
| 2900      |  |  |
| 3000-3999 | HUMAN RESOURCES / PERSONNEL            |  |
| 3000      | Human Resources/Personnel (General)    |  |
| 3050      | Equal Opportunity                      |  |

| 3100 | Executive Human Resources Management (Senior Executive Service (SES)) |  |
|------|---|--|
| 3200 | Personnel Provisions (General)  |  |
| 3210 | Basic Concepts and Definitions  |  |
| 3211 | Veteran's Preference  |  |
| 3212 | Competitive Service and Status  |  |
| 3213 | Excepted Service  |  |
| 3230 | Organization of the Government for Personnel Management               |  |
| 3250 | Personnel Management in Agencies                                      |  |
| 3260 |   |  |
| 3270 | Direction and Control of the Personnel Program                        |  |
| 3271 | Developing Policies, Procedures, Program, and Standards               |  |
| 3272 | Personnel Policy Formulation and Personnel Issuances                  |  |
| 3273 | Inspections, Surveys, and Audits                                      |  |
| 3274 | Corrective Actions  |  |
| 3275 | Evaluation of Personnel Programs                                      |  |
| 3280 | Military Personnel  |  |
| 3290 | Personnel Records and Processing                                      |  |
| 3291 | Personnel Reports   |  |
| 3292 | Development of Personnel Statistics                                   |  |
| 3293 | Personnel Records and Files   |  |
| 3294 | Release of Personnel Information                                      |  |
| 3295 | Personnel Forms and Documents   |  |
| 3296 | Processing Personnel Actions  |  |
| 3300 | Employment (General)  |  |
| 3301 | Overseas Employment   |  |
| 3302 | Employment in the Excepted Services                                   |  |
| 3303 | Military Service Obligation and Draft Deferment                       |  |
| 3304 | Employment of Experts and Consultants                                 |  |
| 3305 | Dual Employment and Dual Compensation                                 |  |
| 3306 | Personal Service Contracts  |  |
|      |   |  |

| 3307 | Detailees   |  |
|------|---|--|
| 3310 | Authority for and Tenure of Employment  |  |
| 3311 | Power of Appointment and Removal  |  |
| 3312 | Position Control  |  |
| 3315 | Career and Career-Conditional Employment  |  |
| 3316 | Temporary and Indefinite Employment   |  |
| 3317 | Senior Executive Service Career Appointee Merit Staffing  |  |
| 3319 | Management of Senior Scientific and Technical and Other Senior Level Positions                    |  |
| 3320 |   |  |
| 3330 | Recruitment, Selection, and Placement   |  |
| 3331 | Organization for Recruitment and Examining  |  |
| 3332 | Recruitment and Selection Through Competitive Examination   |  |
| 3333 | Recruitment and Selection for Temporary and Term Appointment                                      |  |
| 3334 | Personnel Mobility Agreements Under Title IV of the Intergovernmental Personnel Act (IPA) of 1970 |  |
| 3335 | Promotion and Internal Placement  |  |
| 3337 | Examining System  |  |
| 3338 | Qualification Requirements - General  |  |
| 3339 | Qualification Requirements - Medical  |  |
| 3340 | Transfers   |  |
| 3350 | Job Retention   |  |
| 3351 | Reduction in Force (RIF)  |  |
| 3352 | Reemployment Rights   |  |
| 3353 | Restoration after Military Duty   |  |
| 3400 | Employee Performance and Utilization  |  |
| 3410 | Employee Development (Training)   |  |
| 3420 |   |  |
| 3430 | Performance Evaluation (Appraisals)   |  |
| 3440 |   |  |
| 3450 | Employee Recognition and Incentives   |  |
| 3451 | Incentive Awards  |  |

|      |  | 1 |
|------|--|---|
| 3452 | Suggestion System  |   |
| 3500 | Position Classification, Pay, and Allowances                         |   |
| 3510 | Position Classification and Job Evaluation                           |   |
| 3511 | Position Classification Under the Classification Act System          |   |
| 3512 | Job Evaluation Under Prevailing Rate System                          |   |
| 3513 | Employee Classification Appeals                                      |   |
| 3515 | Classification - Excepted Positions                                  |   |
| 3520 |  |   |
| 3530 | Pay Rates and Systems (General)                                      |   |
| 3531 | Pay Under the Classification Act System                              |   |
| 3532 | Pay Under Prevailing Rate System                                     |   |
| 3534 | Pay Under Other Systems  |   |
| 3537 | Critical Position Pay Authority                                      |   |
| 3539 | Conversions Between Pay Systems                                      |   |
| 3540 |  |   |
| 3550 | Pay Administration (General)   |   |
| 3553 | Waiver of Pay/Retirement Reduction for Military or Civilian Retirees |   |
| 3560 |  |   |
| 3570 |  |   |
| 3571 | Travel and Transportation for Recruitment                            |   |
| 3580 |  |   |
| 3590 | Allowances and Differentials   |   |
| 3591 | Allowances and Differentials Payable in Non-Foreign Areas            |   |
| 3592 | Overseas Allowances and Post Differentials                           |   |
| 3593 | Subsistence, Quarters, and Laundry                                   |   |
| 3594 | Allowances for Uniforms  |   |
| 3600 | Time and Attendance  |   |
| 3610 | Hours of Duty  |   |
| 3620 |  |   |
| 3630 | Absence and Leave  |   |
| 3700 | Personnel Relations and Services                                     |   |

|      | http://ilodiso.gsic.nasa.gov/                        |  |
|------|--|--|
| 3710 | Personnel Relations                                  |  |
| 3711 | Employee Management Relations                        |  |
| 3712 | Employee Organization and Activities                 |  |
| 3713 | Nondiscrimination                                    |  |
| 3715 | Nondisciplinary Separations, Demotions and Furloughs |  |
| 3720 |  |  |
| 3730 | Suitability and Conduct                              |  |
| 3731 | Suitability  |  |
| 3733 | Political Activities of Federal Employees            |  |
| 3734 | Holding State or Local Office                        |  |
| 3735 | Employee Responsibilities and Conduct                |  |
| 3736 | Employee Investigations                              |  |
| 3740 |  |  |
| 3750 | Discipline and Adverse Actions                       |  |
| 3751 | Discipline   |  |
| 3752 | Adverse Actions                                      |  |
| 3760 |  |  |
| 3770 | Remedies   |  |
| 3771 | Employee Grievances and Administrative Appeal        |  |
| 3772 | Appeals to the Commission                            |  |
| 3780 |  |  |
| 3790 | Services to Employees (General)                      |  |
| 3792 | Employee Assistance Program                          |  |
| 3800 | Insurance and Annuities                              |  |
| 3810 | Injury Compensation                                  |  |
| 3820 |  |  |
| 3830 | Retirement and Social Security                       |  |
| 3831 | Retirement   |  |
| 3832 |  |  |
| 3840 |  |  |
| 3850 | Unemployment Compensation                            |  |
|      |  |  |

|           | nup://nodis3.gstc.nasa.gov/                                    |  |
|-----------|--|--|
| 3860      |  |  |
| 3870      | Group Life Insurance   |  |
| 3880      |  |  |
| 3890      | Group Health Insurance   |  |
| 3900      | General and Miscellaneous                                      |  |
| 3910      |  |  |
| 3920      |  |  |
| 3930      | Programs for Specific Positions and Examinations               |  |
| 3933      | Qualification Requirements for Specific Positions              |  |
| 3938      | Classification and Pay for Specific Positions                  |  |
| 3940      | Charity Drives, Contributions, and Solicitations               |  |
| 3950      | Credit Unions and Banking Facilities                           |  |
| 3960      |  |  |
| 3970      | Space Flight Participants                                      |  |
| 4000-4999 | PROPERTY AND SUPPLY  |  |
| 4000      | Property and Supply (General)                                  |  |
| 4010      | Government Property Responsibility                             |  |
| 4020      | Property Surveys Lost, Damaged, and Destroyed                  |  |
| 4030      | Workload and Planning  |  |
| 4040      | Supply Sampling  |  |
| 4050      | Sources of Supply  |  |
| 4060      | Returnable Containers  |  |
| 4100      | Inventory Management (General)                                 |  |
| 4110      | Criteria for Inventory   |  |
| 4120      | Management of Stores Stock                                     |  |
| 4130      | Physical Inventory   |  |
| 4200      | Equipment Management (General)                                 |  |
| 4210      | Property Accountability and Controls                           |  |
| 4220      | Use and Replacement Standards for Office Furniture/Furnishings |  |
| 4300      | Utilization and Disposal                                       |  |
| 4310      | Utilization and Excess   |  |

| 4320      | Disposal of Surplus and Personal Property                      |  |
|-----------|--|--|
| 4330      |  |  |
| 4340      | Disposal of Property at Foreign Offices                        |  |
| 4350      | Exchange and Sale of Property                                  |  |
| 4360      | Reporting of Excess and Surplus Property                       |  |
| 4370      | Cannibalization of Equipment                                   |  |
| 4380      |  |  |
| 4390      |  |  |
| 4400      | Supply Cataloging  |  |
| 4410      | Maintenance of Federal Cataloging                              |  |
| 4420      | Provisioning Screening Procedures                              |  |
| 4430      | Local Stock Lists  |  |
| 4500      | Storage and Distribution                                       |  |
| 4510      | Storage Standards and Criteria                                 |  |
| 4520      | Receiving and Inspection Processes                             |  |
| 4530      | Distribution Processes   |  |
| 4600      | Expanded Supply Control  |  |
| 4610      | On-Site Working Stores   |  |
| 4700      |  |  |
| 4800      |  |  |
| 4900      |  |  |
| 5000-5999 | PROCUREMENT/SMALL BUSINESS /INDUSTRIAL RELATIONS               |  |
| 5000      | Procurement/Small Business/Industrial Relations (General)      |  |
| 5100      | Procurement (Contracts) - General                              |  |
| 5101      | Federal Acquisition Regulations (FAR) Systems                  |  |
| 5102      | Definitions of Words and Terms                                 |  |
| 5103      | Improper Business Practices and Personal Conflicts of Interest |  |
| 5104      | Administrative Matters   |  |
| 5105      | Publicizing Contract Actions                                   |  |
| 5106      | Competition Requirements                                       |  |
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|      | http://nodiss.gsrc.nasa.gov/  |  |
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| 5108 | Required Sources of Supplies and Services                               |  |
| 5109 | Contractor Qualifications   |  |
| 5110 | Market Research   |  |
| 5111 | Describing Agency Needs   |  |
| 5112 | Acquisition of Commercial Items   |  |
| 5113 | Simplified Acquisition Procedures                                       |  |
| 5114 | Sealed Bidding  |  |
| 5115 | Contracting by Negotiation  |  |
| 5116 | Types of Contracts  |  |
| 5117 | Special Contracting Methods   |  |
| 5118 | [Reserved per FAR]  |  |
| 5119 | Small Business Programs   |  |
| 5120 | [Reserved per FAR]  |  |
| 5121 | [Reserved per FAR]  |  |
| 5122 | Application of Labor Laws to Government Acquisitions                    |  |
| 5123 | Environment, Conservation, Occupational Safety, and Drug-Free Workplace |  |
| 5124 | Protection of Privacy and Freedom of Information                        |  |
| 5125 | Foreign Acquisition   |  |
| 5126 | Other Socioeconomic Programs  |  |
| 5127 | Patents, Data, and Copyrights   |  |
| 5128 | Bonds and Insurance   |  |
| 5129 | Taxes   |  |
| 5130 | Cost Accounting Standards Administration                                |  |
| 5131 | Contract Cost Principles and Procedures                                 |  |
| 5132 | Contract Financing  |  |
| 5133 | Protests, Disputes, and Appeals   |  |
| 5134 | Major System Acquisition  |  |
| 5135 | Research and Development Contracting                                    |  |
| 5136 | Construction and Architect-Engineer Contracts                           |  |
| 5137 | Service Contracting   |  |
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|      | http://ilodiso.gsic.nasa.gov/                |  |
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| 5138 | Federal Supply Schedule Contracting          |  |
| 5139 | Acquisition of Information Technology        |  |
| 5140 | [Reserved per FAR]                           |  |
| 5141 | Acquisition of Utility Services              |  |
| 5142 | Contract Administration and Audit Services   |  |
| 5143 | Contract Modifications                       |  |
| 5144 | Subcontracting Policies and Procedures       |  |
| 5145 | Government Property                          |  |
| 5146 | Quality Assurance                            |  |
| 5147 | Transportation                               |  |
| 5148 | Value Engineering                            |  |
| 5149 | Termination of Contracts                     |  |
| 5150 | Extraordinary Contractual Actions            |  |
| 5151 | Use of Government Sources by Contractors     |  |
| 5152 | Solicitation Provisions and Contract Clauses |  |
| 5153 | Forms  |  |
| 5160 |  |  |
| 5170 |  |  |
| 5171 | Mid-Range Procurement Procedures             |  |
| 5172 | Acquisition of Investigations                |  |
| 5180 |  |  |
| 5190 |  |  |
| 5200 | Contractor Labor Relations                   |  |
| 5210 | Labor Relations Boards                       |  |
| 5220 | Disputes, Strikes, and Work Stoppages        |  |
| 5300 | Reliability and Quality Assurance            |  |
| 5310 | General Provisions                           |  |
| 5311 | NASA-DOD Relationships                       |  |
| 5320 | Reliability Policies and Programs            |  |
| 5330 | Quality Policies and Programs                |  |
| 5340 | Contamination Control                        |  |
|      |  |  |

| 5400      | Contractor-Held Government Property               |  |
|-----------|---|--|
| 5500      | Patent Waiver                                     |  |
| 5600      | Statement of Work                                 |  |
| 5610      | Work Breakdown Structure                          |  |
| 5700      | Awards, Inventions, and Contributions             |  |
| 5800      | Grants and Cooperative Agreements                 |  |
| 5900      | Contractor Financial Management and Reporting     |  |
| 6000-6999 | TRANSPORTATION                                    |  |
| 6000      | Transportation (General)                          |  |
| 6010      | Definition of Terms                               |  |
| 6020      | Transportation Officers                           |  |
| 6021      |   |  |
| 6022      | Appointment and Responsibilities                  |  |
| 6030      | Transportation Planning                           |  |
| 6040      | Relationships with Other Government Agencies      |  |
| 6041      | Participation before Regulatory Agencies          |  |
| 6050      | Transportation Publications, Records, and Reports |  |
| 6051      | Preparation of Government Bills of Lading         |  |
| 6100      | Commercial Freight Services                       |  |
| 6110      | Freight Rates, Charges and Classification         |  |
| 6120      | Freight Traffic Negotiations                      |  |
| 6130      | Carrier and Mode Selection                        |  |
| 6140      | Accessorial Transportation Services               |  |
| 6200      | Traffic Management Programs                       |  |
| 6210      | Procurement Traffic Management                    |  |
| 6220      | Loss and Damage in Transit                        |  |
| 6300      | Transportation of Unusual or Hazardous Cargo      |  |
| 6310      | Export Traffic                                    |  |
| 6320      | Import Traffic                                    |  |
| 6330      | Explosives and Other Dangerous Articles           |  |
| 6340      | Oversize and Overweight Cargo                     |  |

|           | http://hotiss.gsrc.nasa.gov/                                |  |
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| 6350      | Classified Cargo  |  |
| 6400      | Preparation and Handling of Cargo                           |  |
| 6410      | Preservation, Packaging, and Packing Supplies and Equipment |  |
| 6420      | Loading, Blocking and Bracing                               |  |
| 6430      | Operation and Maintenance of Materials Handling Equipment   |  |
| 6500      | Special Airlift Services                                    |  |
| 6600      | Transportation and Transport Engineering                    |  |
| 6610      | Movement of Large Launch Vehicles                           |  |
| 6620      | NASA Transportability                                       |  |
| 6700      | Motor Vehicle Operation and Management                      |  |
| 6710      | NASA Motor Vehicle Program                                  |  |
| 6720      | Vehicle Authorization and Acquisitions                      |  |
| 6730      | Vehicle Operations and Control                              |  |
| 6740      | Vehicle Maintenance and Motor Pools                         |  |
| 6750      | Vehicle Accidents   |  |
| 6752      | Lost, Damaged, and Destroyed Vehicles                       |  |
| 6760      | Vehicle Marking and Identification                          |  |
| 6770      | Leased and Rented Vehicles                                  |  |
| 6780      | Automotive Equipment  |  |
| 6790      |   |  |
| 6800      | Passenger Transportation                                    |  |
| 6810      | Local Passenger Service                                     |  |
| 6900      |   |  |
| 7000-7999 | PROGRAM FORMULATION   |  |
| 7000      | Program Formulation General                                 |  |
| 7010      | Agency Program Goals and Objectives                         |  |
| 7020      | Long-Range Planning   |  |
| 7030      | Intermediate-Range Planning                                 |  |
| 7040      | Program Planning and Review                                 |  |
| 7050      | Low Cost Systems Program                                    |  |
| 7060      | Program and Project Logistics Policy                        |  |

| 7100 | Research and Development Planning and Approval                        |  |
|------|---|--|
| 7110 | Advanced Studies Planning and Approval                                |  |
| 7120 | Project Planning and Approval   |  |
| 7121 | Phased Project Planning and Approval                                  |  |
| 7122 | Other Project Planning and Approval                                   |  |
| 7123 | Systems Engineering   |  |
| 7130 | Supporting Research and Technology Planning and Approval              |  |
| 7140 | University Program  |  |
| 7150 | Project Scheduling and Implementation                                 |  |
| 7160 | Project Termination   |  |
| 7170 | Human Research  |  |
| 7200 | Institutional Planning and Approval                                   |  |
| 7210 | Establishment of Agency Institutional Goals and Objectives            |  |
| 7220 | Establishment of Center Institutional Goals and Objectives            |  |
| 7230 | Institutional Planning - Center Development                           |  |
| 7231 | Human Resources Planning and Plans                                    |  |
| 7232 | Facility Master Planning and Plans                                    |  |
| 7233 | Center Technical Capability Planning and Plans                        |  |
| 7234 | Center Institutional Capability Planning and Plans                    |  |
| 7235 | Site Selection  |  |
| 7400 | Approval and Management of Financial Reports for Contracts and Grants |  |
| 7500 | Commercialization (of NASA Technology and Systems)                    |  |
| 7600 | Program Operating Plans   |  |
| 7610 | General Policies and Procedures                                       |  |
| 7620 | Research and Program Management                                       |  |
| 7630 | Research and Development  |  |
| 7640 | Construction of Facilities  |  |
| 7700 | Human Resources Utilization   |  |
| 7710 | General   |  |
| 7720 | Determination of Human Resources Requirements                         |  |

| 7730      | Personnel Complement Ceilings and Controls       |  |
|-----------|--|--|
| 7740      | Human Resources Utilization Programs and Reports |  |
| 7800      | Reserved   |  |
| 7900      | Aircraft Operations and Management               |  |
| 7910      | Aircraft Operations Management                   |  |
| 7920      | Administrative Aircraft Management               |  |
| 8000-8999 | PROGRAM MANAGEMENT                               |  |
| 8000      | Program Management - General                     |  |
| 8005      | Major Flight and Development                     |  |
| 8010      | Major Flight and Development - General           |  |
| 8020      | Program Control                                  |  |
| 8030      | Flight Experiments and Tasks                     |  |
| 8040      | Configuration Control                            |  |
| 8050      | Systems Integration and Checkout                 |  |
| 8060      | Systems Design                                   |  |
| 8070      | Technical Standards and Specifications           |  |
| 8071      | Structures, Mechanical, and Thermal              |  |
| 8072      | Materials and Processes                          |  |
| 8073      | Power and Electrical                             |  |
| 8074      | Communication/Data Handling/Information Systems  |  |
| 8075      | Electronics and Avionics                         |  |
| 8076      | Fluids, Propulsion                               |  |
| 8077      | Systems, Integration, Analysis and Test          |  |
| 8078      | Human Factors                                    |  |
| 8079      | Ground and Flight Operations                     |  |
| 8080      | Tests and Testing                                |  |
| 8090      | NASA Engineering Standards                       |  |
| 8100      | Advanced Studies                                 |  |
| 8110      | General  |  |
| 8120      | Conduct of Studies                               |  |
| 8130      | Study Reports                                    |  |
|           |  |  |

| 8132 | In-House Reports                                     |  |
|------|--|--|
| 8134 | Contractor Study Reports                             |  |
| 8200 | Supporting Research and Technology (SRT)             |  |
| 8210 | General  |  |
| 8220 | Conduct of SRT                                       |  |
| 8230 | Coordination and Dissemination                       |  |
| 8300 | Grants and Research Contracts                        |  |
| 8310 | General  |  |
| 8320 | University Programs                                  |  |
| 8330 | Evaluation of Proposals                              |  |
| 8340 | Termination  |  |
| 8400 | Tracking and Data Acquisition - General              |  |
| 8410 | Tracking Stations                                    |  |
| 8420 | Network Spaceflight Tracking and Data Network (STDN) |  |
| 8430 | Mission Records                                      |  |
| 8440 | Balloons and Sounding Rockets                        |  |
| 8450 | System Records                                       |  |
| 8500 | Environmental Management (General)                   |  |
| 8510 | External Activities                                  |  |
| 8520 | Budget   |  |
| 8530 | Environmental Media                                  |  |
| 8540 | Pollution Prevention                                 |  |
| 8550 | Compliance   |  |
| 8560 | Restoration / Remediation                            |  |
| 8570 | Conservation   |  |
| 8580 | National Environmental Policy Act (NEPA)             |  |
| 8590 | Management and Information Systems                   |  |
| 8600 | Operations   |  |
| 8610 | Operations General                                   |  |
| 8620 | Mission Reports                                      |  |
| 8621 | Mission Failure and Investigations and Reports       |  |

| 8630 | Launch Operations   |  |
|------|---|--|
| 8631 | Launch Scheduling   |  |
| 8700 | Safety and Mission Assurance                              |  |
| 8710 | Safety and Mission Assurance Policy (General) (S&MA)      |  |
| 8715 | Occupational Safety and Health Program Application (OSHA) |  |
| 8720 | Reliability, Availability, and Maintainability Policy     |  |
| 8730 | Quality Management  |  |
| 8740 |   |  |
| 8750 | Software Management Assurance Policy                      |  |
| 8800 | Real Property and Facilities                              |  |
| 8810 | Land and Improvements                                     |  |
| 8811 | Acquisition   |  |
| 8812 | Utilization and Management                                |  |
| 8813 | Transfer of / Disposal                                    |  |
| 8814 | Housing and Personnel Quarters                            |  |
| 8820 | Construction of Facilities (C of F)                       |  |
| 8821 | General   |  |
| 8822 | Criteria and Standards                                    |  |
| 8823 | Design and Engineering                                    |  |
| 8824 | Cost Estimation   |  |
| 8825 | Inspection, Supervision, and Acceptance                   |  |
| 8826 | Major Construction  |  |
| 8827 | Minor Construction  |  |
| 8828 | Alterations and Repairs                                   |  |
| 8830 | Maintenance, Repair, and Operation of Facilities          |  |
| 8831 | General   |  |
| 8832 | Criteria and Standards                                    |  |
| 8833 | Inspections   |  |
| 8834 | Structure and Equipment                                   |  |
| 8835 | Grounds and Appurtenances                                 |  |
| 8836 | Utility Systems   |  |

| 8837      | Refuse Collections and Disposal                                      |  |
|-----------|--|--|
| 8838      | Fire Protection and Fire Fighting                                    |  |
| 8839      | Plant Support Services   |  |
| 8840      |  |  |
| 8850      | Logistics  |  |
| 8900      | Program Medical Support  |  |
| 8910      | Care and Use of Animals  |  |
| 9000-9799 | FINANCIAL MANAGEMENT   |  |
| 9000      | Principles and General Policies                                      |  |
| 9010      | NASA Financial Management Requirements                               |  |
| 9020      | Reserved   |  |
| 9030      | Reserved   |  |
| 9040      | Appropriated Funds   |  |
| 9050      | Cash Management & Administrative Control of Appropriations and Funds |  |
| 9060      | Accrual Accounting   |  |
| 9070      | Working Capital Funds  |  |
| 9080      | User Charges and Rental Charges                                      |  |
| 9090      | Reimbursable Agreements  |  |
| 9095      | Reserved   |  |
| 9100      | Budget and Financial Management and Budgeting Systems                |  |
| 9110      | Reserved   |  |
| 9120      | Reserved   |  |
| 9130      | Reserved   |  |
| 9140      | Reserved   |  |
| 9200      | Accounting   |  |
| 9210      | Accounting Principles  |  |
| 9220      | General Ledger Accounting  |  |
| 9230      | Reserved   |  |
| 9240      | Cost Accounting  |  |
| 9250      | Property Accounting  |  |
|           |  |  |

| 9260 | Liability Accounting  |  |
|------|---|--|
| 9270 | Reserved  |  |
| 9280 | Expenditure Accounting  |  |
| 9290 | Miscellaneous Accounting  |  |
| 9300 | Financial Reports   |  |
| 9310 | Agency Reports  |  |
| 9320 | External Reports - Accounting                                   |  |
| 9330 | External Reports - Budget                                       |  |
| 9340 | Reserved  |  |
| 9350 | Center Reports  |  |
| 9360 | Reserved  |  |
| 9370 | Reserved  |  |
| 9380 | Reserved  |  |
| 9390 | Reserved  |  |
| 9400 | Budget Formulation and Execution                                |  |
| 9410 | Planning, Programming, Budgeting, and Execution - General       |  |
| 9420 | Budget Formulation  |  |
| 9421 | Budget Call-Instructions and Guidelines                         |  |
| 9422 | Preparation and Submission of Estimates                         |  |
| 9423 | Headquarters Review and Approval                                |  |
| 9430 | Formulation of Annual Appropriation and Authorization Languages |  |
| 9440 | President's Budget  |  |
| 9441 | Budget Call   |  |
| 9442 | Preparation and Submission of Estimates                         |  |
| 9443 | Headquarters Review and Approval                                |  |
| 9444 | External Agency Review and Approval                             |  |
| 9450 | Congressional Budget  |  |
| 9451 | Budget Call   |  |
| 9452 | Preparation and Submission of Material                          |  |
| 9453 | Headquarters Review and Approval                                |  |
| 9454 | Preparation and Submission of Congressional Budget              |  |

| 9460      | Conduct of NASA Participation in Congressional Hearings (on Budget) |  |
|-----------|---|--|
| 9470      | Budget Execution  |  |
| 9480      | Reserved  |  |
| 9490      | Reserved  |  |
| 9500      | Contractor Financial Management Reporting System                    |  |
| 9600      | Fiscal Operations   |  |
| 9610      | Accounts Receivable , Billing, and Collections                      |  |
| 9620      | Payroll   |  |
| 9630      | Accounts Payable and Disbursements                                  |  |
| 9640      | Claims  |  |
| 9645      | Erroneous Payment of Salaries and Wages                             |  |
| 9650      | Reserved  |  |
| 9660      | Essential/Vital Records and Emergency Transactions                  |  |
| 9670      | Reserved  |  |
| 9680      | Grants Financial Management   |  |
| 9690      | Investments   |  |
| 9700      | NASA Travel Regulations   |  |
| 9710      | General Provisions  |  |
| 9720      | Travel Under Special Circumstances                                  |  |
| 9730      | Travel Cards  |  |
| 9740      | Travel Provisions for Non-employees                                 |  |
| 9750      | Extended Temporary Duty Travel (ETDY) Allowance                     |  |
| 9760      | Relocation Allowance  |  |
| 9770      | Conferences Attendance and Reporting                                |  |
| 9780      | Payment of Expenses Connected With the Death of Certain Employees   |  |
| 9790      | Payment of Travel Expenses for Non-Federal Source                   |  |
| 9800-9999 | INSPECTOR GENERAL FILES - AUDITS AND INVESTIGATIONS                 |  |
| 9800      | Investigations Program  |  |
| 9810      | NASA Investigations Program   |  |
| 9820      | General Polices and Responsibilities                                |  |

| 9830 | Investigative Procedures                             |
|------|--|
| 9840 | Reports of Investigations                            |
| 9850 |  |
| 9860 | Types of Cases, Elements and Proof Needed            |
| 9870 | Testifying in Judicial or Administrative Proceedings |
| 9880 | Computer Crimes                                      |
| 9890 | Inspections and Assessments Files                    |
| 9900 | Audit Program  |
| 9910 | NASA Audit Program                                   |
| 9920 | Audit Standards                                      |
| 9930 | Audit Planning                                       |
| 9940 | Audit Performance (Conducting an Audit)              |
| 9950 | Audit Reporting                                      |
| 9960 | Audits of Contractors and Grantees                   |
| 9970 |  |
| 9980 | Special Audit Programs                               |
| 9990 | Miscellaneous Audit Topics                           |

## **Appendix E. NASA Records Retention Schedules Update Procedures**

- E.1 Occasionally, the creation of new record types, changes in the nature of records, or changes in NASA business requirements for retention of sets of records necessitate creation of a new retention schedule item, or revision of an existing one.
- E.2 When situations like this arise, owners or custodians of the records in question should coordinate with their Center Records Manager to propose new/revised schedules as quickly as possible and as often as necessary in order to ensure all NASA records are scheduled.
- E.3 To facilitate the timely updating of the NRRS, a process of submitting and reviewing proposed schedules is provided in this document. The steps below describe this process and identify the actions for each step. After a proposed schedule is approved, an update entry will be made to NRRS 1441.1, including an entry in the Change History log. The NASA Records Officer will then notify all Center Records Managers and the change requesting office of the approval and NRRS update.

## E.4 NRRS Change Proposal Process

- E.4.1 This process should be followed when a record or records series cannot be identified in either NRRS 1441.1, as revised, or the NARA GRS. Records of this nature are considered "unscheduled." Unscheduled records stay in this state until a schedule approval from NARA is granted. Unscheduled records are managed as though "Permanent," meaning they cannot be destroyed until NARA has appraised them and/or a new schedule has been established.
- E.4.2 When the Record Owner determines that a type of record, or series of records, either does not exist in the NRRS or needs modification, the Record Owner is to contact the NASA Center Records Manager to help develop a proposed schedule for the records. The RM will appraise the records and assist the Record Owner in drafting a new schedule following an existing one as a model. No one knows records better than the people who create and/or work with them. Thus, the owner's lead in providing input is imperative.
- E.4.3 If a new schedule is being proposed, it should be formatted the same as existing schedules, with a description of the nature of the records explaining what they are and how they are used. Proposed retentions should also be indicated as either "permanent," if they are of a historically significant nature, or "temporary."
- E.4.4 If a new temporary item is added, the retention should be based on the Agency's business need or regulatory requirements for the records. Do they need to be retained for a set amount of time to meet regulatory requirements (such as from EPA)? Or do they need to be retained for a period during which an audit is feasible? If there are no external drivers of a retention period, the owner is free to determine how long the office will have need of them for the purposes they are being held.
- E.4.5 If an existing schedule with modifications could better fit the records, a revision may be proposed. Likewise, if there is need to retain records longer than the current schedule, or a subset of records needs to be called out for a shorter retention, a schedule revision may be more appropriate. In any of these cases, the Records Owner may copy an existing schedule item from the NRRS and "redline" it.
- E.4.6 If the schedule is for records of a function spanning the entire Agency, it would be ideal to coordinate the records description(s) and retention(s) with the entire community.
- E.4.7 A written justification of why the new or revised schedule is needed should be provided by the applicable Center Records Manager, together with the proposed schedule item(s), to the NASA Records Officer. The justification may be as simple as. "These records are unscheduled."
- E.4.8 All proposed changes and recommendations may be submitted by the Center Records Manager (or with the Center Records Manager copied) via e-mail to the NASA Records Officer, NASA Headquarters.
- E.4.9 Each Center may have its own supplemental procedures for developing proposed schedules, but the procedure(s) should at least follow the steps in the table below.

| Step | Action Officer | Action  |
|------|----------------|---|
| 1    | Record Owner   | Verify with the Center Records Manager and NASA Records Officer that no schedule exists to cover the records. |

| Record Owner   Coordinate with Center Records Manager to either revise an existing schedule or create a new schedule. This includes determining the functions and activities documented by the records to be scheduled, developing an inventory of the records, including a description of the records, informational content, their use, medium, location, volume, and inclusive dates.  In addition, evaluate the period of time the Agency requires use of each specific record series or system by reference to its uses and value to operations or legal obligations. Based on Agency needs, formulate specific recommended disposition instructions for each record series or each part of an automated information system. Include cutoff instructions, retention periods, including length of time to retain onsite, instructions for retirement of records to inactive storage, if appropriate, and retention period before destruction of temporary records or transfer of permanent records to the National Archives. Recommend retention periods taking into account the rights of the Government and the rights of those directly affected by Agency actions.    Record Owner |
|--|
| review and approval.  Center Records Manager  Review submittal. This review includes coordinating all proposed changes with other officials and offices creating and maintaining similar records at the Center.  Center Records Manager  If neither an NRRS nor GRS schedule exists for Agency needs, coordinate a review of the proposed change to the NRRS by the Center Office of Chief Counsel.  Center Records Manager  If the proposal is disapproved, the Center Records Manager notifies the Record Owner and works with the Record Owner to correct the problem.  Center Records Manager  If the proposal is approved at the Center level, forward the proposed schedule and any attachments to the other Center Records Manager(s)   |
| Manager with other officials and offices creating and maintaining similar records at the Center.  Center Records Manager If neither an NRRS nor GRS schedule exists for Agency needs, coordinate a review of the proposed change to the NRRS by the Center Office of Chief Counsel.  Center Records Manager If the proposal is disapproved, the Center Records Manager notifies the Record Owner and works with the Record Owner to correct the problem.  Center Records Manager If the proposal is approved at the Center level, forward the proposed schedule and any attachments to the other Center Records Manager(s)   |
| Manager a review of the proposed change to the NRRS by the Center Office of Chief Counsel.  Center Records Manager If the proposal is disapproved, the Center Records Manager notifies the Record Owner and works with the Record Owner to correct the problem.  Center Records Manager If the proposal is approved at the Center level, forward the proposed schedule and any attachments to the other Center Records Manager(s)  |
| Manager Record Owner and works with the Record Owner to correct the problem.  Center Records Manager If the proposal is approved at the Center level, forward the proposed schedule and any attachments to the other Center Records Manager(s)   |
| Manager schedule and any attachments to the other Center Records Manager(s)  |
|  |
| Other RM(s)  Each Center Records Manager should determine if the records described in the proposal are applicable to that Center. If they are, that RM should have the appropriate Center organization review and provide comment on the proposal.   |
| Originating Center Records Manager  Consolidate all Center comments into one response with Centers noted and send to the NASA Records Officer with the resultant proposed schedule and attachments. If a Center has no comments, a "no comments" notice will be included in the package.   |
| NASA Records Officer Review the proposal, making any modifications needed based on current NARA and/or Government Accounting Office general guidance.  |
| NASA Records Officer Send the revised schedule, with attachments, to the Office of NASA General Counsel for review and concurrence.  |
| Office of the General Counsel Review proposed schedule and submit comments to the NASA Records Officer. If the General Counsel has no comments, a concurrence with "no comments" reply should be sent to the NASA Records Officer.   |
| 13 NASA Records Disposition comments, if any. Then, finalize and enter the schedule into   |
| Officer ERA for NARA's review and approval.  |

| 15 | NASA Records<br>Officer   | If NARA disapproves the proposed schedule, work with NARA and the submitting Center to make necessary modifications to obtain NARA approval. Coordinate any additional NASA reviews required because of the changes.                          |
|----|---------------------------|---|
| 16 | NASA Records<br>Officer   | Upon NARA approval of the proposed schedule, enter the approved retention in the NRRS and publish the updated NRRS in NODIS. Provide notice of NARA approval to all Center Records Managers. Update the NRRS Change History page accordingly. |
| 17 | Center Records<br>Manager | Upon notification of a NARA-approved retention schedule, provide appropriate Center notification(s), e.g., to Center RLOs and custodians, of the changes to the NRRS.   |

## Appendix F. Unauthorized Records Destruction Reporting Guidance

Reporting Intentional or Accidental Unauthorized Destruction of Records (Report to be submitted through the NASA Records Officer.)

- F.1 Text quoted from 36 CFR 1228.104 Reporting.
- a. The head of a Federal agency shall report any unlawful or accidental destruction, defacing, alteration, or removal of records in the custody of that agency to NARA (NWML), 8601 Adelphi Rd., College Park, MD 20740-6001. The report shall include:
- (1) A complete description of the records with volume and dates, if known;
- (2) The office of origin;
- (3) A statement of the exact circumstances surrounding the alienation, defacing, or destruction of the records;
- (4) A statement of the safeguards established to prevent further loss of documentation; and
- (5) When appropriate, details of the actions taken to salvage, retrieve, or reconstruct the records.
- F.2 Survey for Gathering Information for Report of Unauthorized Destruction.
- F.2.1 Information to be gathered for a complete description of the records:
- a. In what media do the records exist?
- b. What is the volume of the subject records?
- c. What records series from the NASA Records Retention Schedules (NRRS) describes them?
- d. From what function do they result? How are they used?
- e. What is the date range of the records?
- f. What is the NRRS-prescribed disposition date for the record?
- F.2.2 What is the office of origin for the records? Give hierarchical line of the organization -- office, division, directorate/program/project, NASA Center.
- F.2.3 Provide a statement of the exact circumstances surrounding the alienation, defacing, or destruction of the records:
- a. What happened?
- b. Where?
- c. How?
- d. Extent and nature of the damage to the records?
- F.2.4 Provide a statement of the safeguards established to prevent further loss of documentation:
- a. If appropriate, what immediate steps were taken to prevent/stop further deterioration to the damaged records?
- b. What analyses and actions were decided on and/or carried out to correct any situations in order to avoid/prevent future such incidents that could lead to damaged records?
- F.2.5 When appropriate, provide details of the actions taken to salvage, retrieve, or reconstruct the records. (This will vary depending on the records media and the nature of the damage.)

## **Appendix G. Cloud Services Records Management Checklist**

- 1. Have all of the key stakeholders (IT, Records Management, Department or Agency Management) met to discuss all relevant requirements before entering into a contract or SLA with a provider?
- 2. Has your cloud service provider met your regulatory requirements?
- 3. Have you assessed your provider's viability?
- 4. Does the provider guarantee record integrity, authenticity, and reliability?
- 5. Do we know who all the participants in the supply chain are (subcontractor layers in cloud-based services) so that we can engage in our (legally mandated) contracts with every party that touches this information?
- 6. What will happen to our data at the end of the contracting period?
- 7. Can we move some or all of our data from one provider to another (vendor lock-in, the use of proprietary software)?
- 8. Does the provider have the technical capability to capture, manage, retain, make available to authorized users, and apply retention schedules to the records or transfer permanent records to NARA?
- 9. Does the provider have sufficient audit management capabilities?
- 10. Has the contract or SLA specified ownership of records and data?
- 11. Does the provider have the technical capabilities to respond to access related issues?
  - access controls/permissions
  - record disposition/destruction actions
  - (If not, can they offer an acceptable proxy for disposition/destruction?)
  - security/privacy breaches
  - legal holds
  - e-Discovery
- 12. How are our data and records segregated from other tenants of this provider?